

7-2 Final Milestone: Project Closure Document

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IT-420 Advanced Information System Implementation

Section R5632

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Introduction

As a leader in the travel application industry, GasBuddy continuously seeks opportunities to improve and expand benefits and services to both end-user customers and third-party business partners. Commuters that are familiar with their immediate commutable area have a reduced need to use the app as fuel prices do not fluctuate much from day-to-day according to GasBuddy's internal research (GasBuddy: Fueling Its Digital Platform for Agility and Growth, 2018). This project addresses an opportunity to improve the frequency of user engagement and increase revenue from third-party business partners by expanding services by incorporating an enhancement to the existing GasBuddy application in the form of a Day Trip feature.

Routine commutable regions are a significant threat to user engagement (GasBuddy: Fueling Its Digital Platform for Agility and Growth, 2018). The objective of this project is to provide a solution to improve the frequency of user engagement to increase monetization from third-party business partners by developing a software enhancement to the GasBuddy application in the form of a Day Trip feature. Taking this measure will help ensure GasBuddy remains an industry leader in the travel app category by expanding its services to further engage users more often and increase business-side revenue.

The Day Trip feature is a nonintrusive enhancement to the GasBuddy app provided as an option on the application home page that allows users to search for regional destination locations of interest. Search filters, destination ratings, destination reviews, and Google APIs will help ensure users are provided with quality, optimized, and current information. The implementation of a new Day Trip feature to expand the GasBuddy application seeks to take advantage of the proven technology solutions currently exhibited within the app; while also maintaining a continuity within GasBuddy's existing successful business model strategy.

Competition from other travel services such as Waze, Gas Guru, and Scout illustrate the necessity for the GasBuddy application to evolve to provide greater benefits to its users and third-party business partners which are required to minimize the risk of these competing threats and to safeguard GasBuddy's position at the pinnacle of the travel app industry. This postmortem report summarizes the strategies, methodologies, tools, and technologies utilized while addressing the obstacles and risks that were overcome to successfully complete the Day Trip feature system prototype.

Verification Plan: Feedback

The verification plan for the Day Trip project will include both formal test cases and collecting stakeholder feedback. Formal testing will be conducted by quality assurance personnel on the development team throughout each sprint. The development team will also utilize a daily build strategy to deploy the system to a test environment which will allow QA and other stakeholders to continuously evaluate the system as it is being developed to provide feedback.

The Day Trip system will be developed utilizing the agile scrum methodology. The development phase will be divided into five sprints with each sprint responsible for the development of a key deliverable. The iterative nature of the agile scrum methodology includes testing during each sprint to prepare each sprint deliverable for a ready state.

Utilizing a daily build strategy to continuously integrate and deploy development to a test environment will allow for quality assurance and stakeholders to test and evaluate the system regularly during each sprint. Additionally, test cases conducted by QA development team personnel will verify and validate the requirements and functionality of the system. Each sprint incorporates several test cases to evaluate the functionality of that sprint's deliverable.

Feedback can then be gathered through daily development team stand up meetings during each sprint and through email by other stakeholders. Feedback will then be logged and track utilizing the BitBucket repository issue tracker. After each element is logged it will be evaluated and categorized to determine if the item is actionable.

Verification Plan: Feedback Criteria

As feedback is gathered, it will be evaluated to be categorized to determine the priority level of each issue and whether the issue is actionable. Items will be categorized by determining its impact to the functionality of the system. The four categories including critical, major, minor, and trivial. Critical elements would include issues that completely keep the system from functioning at all rendering the system useless. Major elements would include vital functionality components of the system not operating properly causing a high rate of user frustration. Minor elements would include less important functionality issues that may frustrate the user but still allow the system's most important operations to function properly. Trivial elements would include minor changes that do not impact the functionality of the software such as UI issues.

Based on the outlined criteria, all critical and major elements would be actionable as those issues have a profound impact on the functionality of the system. Other less critical elements would then only be addressed if time, budget, and resources permit or would be pushed back to a later version or software update.

Verification Plan: Test Cases

Quality assurance team personal will use the following test cases to evaluate the functionality of the key deliverables of the Day Trip project based on the system requirements. Each test case includes an identification ID number, test case title, procedure, and expected results to indicate a pass or fail status.

Test Cases for the Day Trip feature for GasBuddy App						
ID	Test Case	Procedure	Sprint	Deliverable	Expected Results	Pass/Fail
S1-01	Database Location table Loc_ID field	Query Day Trip database 'Location' table Loc_ID field	1	Database	Displays Loc_ID results	
S1-02	Database Location table Loc_Name field	Query Day Trip database 'Location' table Loc_Name field	1	Database	Displays Loc_Name results	
S1-03	Database Location table Loc_Street field	Query Day Trip database 'Location' table Loc_Street field	1	Database	Displays Loc_Street results	
S1-04	Database Location table Loc_City field	Query Day Trip database 'Location' table Loc_City field	1	Database	Displays Loc_City results	
S1-05	Database Location table Loc_State field	Query Day Trip database 'Location' table Loc_State field	1	Database	Displays Loc_State results	
S1-06	Database Location table Loc_ZipCode field	Query Day Trip database 'Location' table Loc_Zipcode field	1	Database	Displays Loc_Zipcode results	
S1-07	Database Location_Details table Details_ID field	Query Day Trip database 'Location_Details' table Details_ID field	1	Database	Displays Details_ID results	
S1-08	Database Location_Details table Loc_ID field	Query Day Trip database 'Location_Details' table Loc_ID field	1	Database	Displays Loc_ID results	
S1-09	Database Location_Details table Filter_ID field	Query Day Trip database 'Location_Details' table Filter_ID field	1	Database	Displays Filter_ID results	
S1-10	Database Location_Details table Ratings_ID field	Query Day Trip database 'Location_Details' table Ratings_ID field	1	Database	Displays Ratings_ID results	
S1-11	Database Location_Details table Review_ID field	Query Day Trip database 'Location_Details' table Review_ID field	1	Database	Displays Review_ID results	
S1-12	Database Filters table Filters_ID field	Query Day Trip database 'Filters' table Filters_ID field	1	Database	Displays Filters_ID results	
S1-13	Database Filters table Category field	Query Day Trip database 'Filters' table Category field	1	Database	Displays Category results	
S1-14	Database Filters table Amenities field	Query Day Trip database 'Filters' table Amenities field	1	Database	Displays Amenities results	
S1-15	Database Filters table Pet_Friendly field	Query Day Trip database 'Filters' table Pet_Friendly field	1	Database	Displays Pet_Friendly results	
S1-16	Database Filters table Fam_Friendly field	Query Day Trip database 'Filters' table Fam_Friendly field	1	Database	Displays Fam_Friendly results	
S1-17	Database Ratings table Ratings_ID field	Query Day Trip database 'Ratings' table Ratings_ID field	1	Database	Displays Ratings_ID results	
S1-18	Database Ratings table Ratings_Score field	Query Day Trip database 'Ratings' table Ratings_Score field	1	Database	Displays Ratings_Score results	
S1-19	Database Reviews table Review_ID field	Query Day Trip database 'Reviews' table Review_ID field	1	Database	Displays Review_ID results	
S1-20	Database Reviews table Review_Comment field	Query Day Trip database 'Reviews' table Review_Comment field	1	Database	Displays Review_Comment results	
S1-21	Database Reviews table Review_User field	Query Day Trip database 'Reviews' table Review_User field	1	Database	Displays Review_User results	
S1-22	Database Reviews table Review_Date field	Query Day Trip database 'Reviews' table Review_Date field	1	Database	Displays Review_Date results	
S1-23	Database JOIN table query	Query Day Trip database using JOIN statement to get comprehensive results from Location_Details, Location, Filters, Ratings, and Reviews tables for multiple Loc_IDs	1	Database	Displays comprehensive location results	
S1-24	Database INSERT data into Location table	Database INSERT data in Location table Loc_ID, Loc_Name, Loc_Street, Loc_City, Loc_State, Loc_Zipcode fields	1	Database	Correctly inserts data into all Location table fields	
S1-25	Database INSERT data into Location_Details table	Database INSERT data in Location table Details_ID, Loc_ID, Filter_ID, Ratings_ID, Reviews_ID fields	1	Database	Correctly inserts data into all Location_Details table fields	
S1-26	Database INSERT data into Filters table	Database INSERT data in Filters table Filter_ID, Category, Amenities, Pet_Friendly, Fam_friendly fields	1	Database	Correctly inserts data into all Filters table fields	
S1-27	Database INSERT data into Ratings table	Database INSERT data in Ratings table Ratings_ID, Rating_Score fields	1	Database	Correctly inserts data into all Ratings table fields	
S1-28	Database INSERT data into Reviews table	Database INSERT data in Reviews table Review_ID, Review_Comment, Review_User, Review_Date fields	1	Database	Correctly inserts data into all Reviews table fields	
S2-01	GUI font style	Day Trip font style is consistent with existing GasBuddy application	2	User Interface	Font style match existing app font	
S2-02	GUI text size	Day Trip text size is consistent with GasBuddy application	2	User Interface	Text size match existing app text	
S2-03	GUI color and layout	Day Trip GUI color and layout is consistent with GasBuddy application	2	User Interface	GUI color and layout match existing app colors and layout	
S2-04	GUI Day Trip button	Day Trip feature button is consistent with GasBuddy application	2	User Interface	Day Trip feature button match other existing app features	
S2-05	GUI Day Trip icon image	Day Trip feature icon image is consistent with GasBuddy application	2	User Interface	Day Trip feature icon match other existing app icon style	
S2-06	Home page Day Trip feature UI button	Click Day Trip feature button on home page	2	User Interface	Displays Day Trip feature input page	
S2-07	Search filters on location input page	Click Day Trip feature button on home page	2	User Interface	Displays Day Trip input page with filter options	
S3-01	Search filter Category by nature	Click on Category > Nature filter option	3	Search Filters	Displays locations related to nature	
S3-02	Search filter Category by art	Click on Category > Art filter option	3	Search Filters	Displays locations related to art	
S3-03	Search filter Category by educational	Click on Category > Educational filter option	3	Search Filters	Displays locations related to educational	
S3-04	Search filter Category by entertainment	Click on Category > Entertainment filter option	3	Search Filters	Displays locations related to entertainment	
S3-05	Search filter Category by historical	Click on Category > Historical filter option	3	Search Filters	Displays locations related to historical	
S3-06	Search filter Category by unusual shopping experiences	Click on Category > Unusual shopping filter option	3	Search Filters	Displays locations related to unusual shopping	
S3-07	Search filter by distance Radius	Click on Radius filter option	3	Search Filters	Displays locations by closest radius	
S3-08	Search filter by Family Friendly	Click on Family Friendly filter option	3	Search Filters	Displaye family friendly locations	
S3-09	Search filter by Pet Friendly	Click on Pet Friendly filter option	3	Search Filters	Displays pet friendly locations	
S4-01	Show location rating	Enter location	4	Ratings	Displays locations with a 1 to 3 star rating for each location	
S4-02	Select location rating input option	Enter location to get option to rate location	4	Ratings	Displays option to rate location for each location	
S4-03	Enter rating	Enter location to get option to rate location and rate with 1 to 3 stars	4	Ratings	Inputed rating is calculated and inserted into Rating table of the database	
S5-01	Show location reviews	Enter location to get option to display reviews for location	5	Reviews	Displays option to read location reviews	
S5-02	Select location reviews	Select option to view location reviews	5	Reviews	Displays actual reviews for location	
S5-03	Display review input option	Enter location to get a leave a review option	5	Reviews	Display an option to leave a review for this location	
S5-04	Enter review	Enter location to get option to leave a review and input a review	5	Reviews	Inputed review inserted into review table of the database	

Postmortem Summary: Methodology

To execute the project effectively a similar strategy from previously implemented successful projects was utilized for the Day Trip feature. The project life cycle consisted of five phases including the initiation phase, planning and pre-execution phase, execution phase, performance and control phase, and the closeout phase. Additionally, the implemented strategy included the agile scrum methodology during the execution phase of the project.

During the initiation phase, meetings with the sponsor stakeholders were conducted to identify key project deliverables to establish the project scope and scope boundaries. The scope statement was then constructed and incorporated into the project proposal documentation. After initial sponsor stakeholder approval, the project then moved into the planning and pre-execution phase. During this phase, several deliverable documents were generated including the project management plan (PMP). The PMP includes several key management document deliverables to be utilized by the project stakeholders to guide, manage, and monitor the project throughout development including the system design document (SDD). The project management plan also defined the project requirements and constraints, and included several other deliverables including the project schedule, budget, communications plan, resource plan, risk management plan, and change management plan.

The execution phase was the third phase of the project development lifecycle; this phase incorporated the agile scrum methodology utilizing sprints during development. The Day Trip system prototype was developed over the course of five sprints. Each sprint was responsible for developing a key system deliverable; consequently, each system deliverable was developed to a functional ready state and dependent on its predecessor deliverables to extend the system functionality as outlined in the work breakdown structure (WBS).

The first sprint of the execution phase included developing the architecture and construction of the database. The second sprint of the execution phase included the construction of the user interface (UI). The Day Trip system search filters deliverable was developed during the third sprint. The next deliverable constructed during the fourth sprint of the execution phase was the destination ratings deliverable. The final deliverable developed during the last sprint was the destination reviews.

The performance and control phase followed to evaluate key performance indicators and control components were reviewed to generate progress and status reports. The final closeout phase of the project provided the timeframe to generate closing document deliverables including the lessons learned, updating relative organization documents, project closing report, and conduct a final sponsor stakeholder meeting.

Postmortem Summary: Method Evaluation

Adhering to a five-phase strategy project life cycle that incorporated the agile scrum methodology during the development phase helped ensure the successful completion of the Day Trip system. The implemented strategy also assured the adherence to allotted resources, time constraints, budget constraints, and scope of the project.

At the beginning of the project life cycle, the planning phase took place to identify the desired functionality elements of the system. These functionality elements, referred to as user stories in the agile methodology, were placed in the product backlog. User stories were then prioritized with an estimation of time to complete them. The prioritized user stories were next moved to a release backlog to determine an estimation of the total time needed to develop the project.

After the release backlog was completed, sprint planning occurred to determine manageable segmented milestones that correspond with key deliverables. The release backlog was then divided up into several sprint backlogs. As the project progressed through each sprint, the amount of work remaining was logged and monitored in a burndown chart to track productivity and to provide an estimate of the completion date of that sprint and project. The burndown chart was an essential tool to ensure the project was progressing smoothly. The burndown velocity provided visual evidence to help stakeholders make the proper adjustments to allocate resources and to keep the project on track.

Short daily scrum meetings took place to help keep the development team informed and in-sync throughout the collaborative process. Then upon the completion of each sprint, the team conducted a meeting to review what went right and wrong to make any adjustments before starting the next sprint.

Using the agile scrum methodology ensured the GasBuddy Day Trip feature prototype was developed systematically in accordance with the stakeholder's requirements and constraints as the progression through the project sprints were routinely evaluated for errors and feedback. The iterative process associated with each sprint and the daily build strategy with the project consistently deployed to a test environment allowed for testing, evaluation, and feedback during the development. The daily build and routine deployment to a test environment during each sprint of the execution phase provided to be an essential strategy that directly contributed to the success of the project. Other elements associated with the agile scrum methodology such as its iterative nature, flexibility, and the burndown chart further provided the project stakeholders with the information and tools to make necessary adjustments to keep the project on schedule and budget.

Additionally, the tools and technologies selected and utilized to develop the Day Trip feature proved to be appropriate. Microsoft Visual Studio integrated development environment (IDE) served to be an integral tool used to develop the code to implement the Day Trip code. The use of Photoshop to develop the visual aspects of the user interface were pertinent to the implementation of the project and to maintain an aesthetically consistent appearance with the existing elements of the GasBuddy application. Lastly, the use of the phpMyAdmin database management application and GoDaddy servers proved to be competent tools and technologies to host the project test environment and database.

Postmortem Summary: Risk Mitigation

While implementing the Day Trip feature several potential risks were identified that could pose a threat to the successful completion of the project. Stakeholder sponsors introducing unexpected features during the software development process could contribute to scope creep that would impact budget and schedule. The risk of scope creep can be mitigated by utilizing the burndown chart associated with the agile scrum methodology. Monitoring development in a burndown chart will help to identify scope creep that could lead to schedule delays and impact the project resources and budget.

Defective or inconsistent user interface design could cause significant delays to development and the timely release of the system. This potential risk can be mitigated by maintaining a consistency with GasBuddy's existing user interface to sustain a familiarity with the new Day Trip feature. Maintaining a consistent familiarity will benefit both the application end users and the support team as they manage the system after release. Additionally, routine testing, evaluation, and feedback utilized during the agile scrum methodology assists with

identifying functionality issues quickly, so they can be addressed before causing unnecessary delays.

User input and data integrity could also pose a risk to the project. The user experience could be dramatically impacted by corrupt data. The risk of data corruption can be mitigated by placing greater credence on data provided by logged in authenticated users compared to guest users. The existing GasBuddy review and rating model also serves to mitigate the risk of corrupt data as spurious inputs would be offset by the consensus of other user inputs.

Productivity risks may occur if sprint phases are too long with excessive goals. Development team members may not properly budget their time during long sprint windows and lose a sense of urgency. Additionally, burndown charts may not identify a lack of productivity immediately during unnecessarily long sprint windows. This productivity risk can be mitigated by maintaining shorter sprint windows with manageable goals and deliverables that can be monitored more effectively to safeguard against this threat.

Inadequate planning and unrealistic timelines also could pose a risk to the project's successful completion. Thorough planning in conjunction with the agile scrum flexibility and tools such as the daily scrum meetings, end of sprint meetings, and the burndown chart can help identify and correct schedule issues to keep the project on schedule to mitigate this risk.

Project Status: Objectives

The fundamental objective of this project is to enhance the existing GasBuddy application with a Day Trip feature to increase user engagement by promoting travel opportunities and increase the number of third-party business interactions to boost monetization. The feature is intended to be a nonintrusive user selected option on the home page that would allow users to search for travel destinations related to their interest. Destination categories

include nature, art, entertainment, educational, historical, events and festivals, and unusual (non-traditional) shopping experiences. Promoting additional travel opportunities serves to benefit both GasBuddy customers and third-party business partners.

Secondary project objectives include the incorporation of filters, ratings, and reviews to enhance the customer experience while utilizing the Day Trip feature. Similar search filters used to narrow the search results for the 'Find Gas Near You' option have been incorporated into the Day Trip feature to maintain software UI consistency and a familiarity. Users prefer an intuitive experience that responds predictably to their actions and a sense of control when interfacing with an application (Shneidermann & Plaisant, 2010). Additional objectives include the integration of ratings and reviews components for destination locations which were similarly modeled from the existing rating and reviews feature of the GasBuddy application.

To summarize, the primary objective and goal of this project was to develop a Day Trip feature to increase user engagement and the monetization of services by enhancing the existing GasBuddy application. Subsequent objectives include allowing the end user to search for destination locations of interest based on user defined filters with the ability to then rate and review their experience. All proposed objectives were successfully met during the development of this project.

Project Status: Issues

The only significant modification made to the project was the necessity to change some of the field names in the database tables to more seamlessly integrate with Google API's for consistency to achieve the desired search results. This required modification was identified during the development of the Day Trip prototype. The modification was minor, but also one that required some UML class diagrams associated with the Day Trip database to be updated in the

project documentation. The impact to the budget of this modification was nominal as the development team was able to make this modification easily within the dedicated database sprint iteration before it could become an issue that may have impeded or delayed the successful completion of some project objectives.

As a result, all project objectives that were proposed were successfully satisfied. Additionally, all objectives were thoroughly evaluated by quality assurance test case verification and validation.

Project Status: Alternative/Recommendations

The Day Trip system was successfully developed without the need to make any alterations or deviate from the original design plan. During the planning phase, after meeting with stakeholders, it was determined that the Day Trip system should closely emulate the existing GasBuddy application in both functionality and appearance. Functionality of a system is essential when designing application software for a positive user experience (Soegaard, 2019).

Emulating the existing application functionality and appearance provides several benefits. Primarily, by emulating the functionality of the existing GasBuddy search feature for fuel station locations, including the subsequent search results, provides a consistency and familiarity throughout the application for the end users. Maintaining the consistent functionality and appearance allows users to operate the new Day Trip search feature in exactly the same way as the existing fuel station search feature. Functional consistency and familiarity will alleviate the learning curve and remove the necessity of training or instruction to operate this new feature to increase its ease of use and effectiveness.

Additionally, another benefit to emulating the existing application functionality and appearance is the ability to utilize existing tools and technologies to develop, manage, and

support the new Day Trip feature to promote efficiency. Those tools and technologies include the integrated development environment and other development software, the Google API integration, and AWS database.

Project Status: Communication

A communication plan is necessary to establish two-way communication between development team personnel and other project stakeholders. The communication plan includes daily standup meetings for development team members and stakeholder meetings during each sprint. Additionally, weekly activity reports will be emailed to project stakeholders and include a feedback forms to gather input throughout the project development. The incorporation of standup meetings, sprint meetings, weekly activity reports, feedback forms, and the project prototype being deployed to a test environment to provide development transparency ensures open two-way communication for stakeholders to gather feedback and input. Additionally, the project prototype being deployed to a test environment allows all stakeholders access to regularly evaluate the project including the functionality, aesthetics, and user interface to communicate feedback.

The Day Trip system project objectives including all deliverables and their associated requirements have been developed and implemented successfully. All test cases were successfully validated and verified during alpha testing by quality assurance development team personnel in accordance with the verification and validation plan and can subsequently be evaluated and verified by all other project stakeholders in the test environment. Additionally, test case results are communicated to stakeholders through meetings and activity reports.

Project Closure: Future Enhancements

An enhancement that could be considered for a future version of the Day Trip system is to incorporate a destinations location map option to be displayed in addition to the itemized list of individual destinations that is currently implemented to showcase user requested search results. However, this enhancement would deviate from the existing functionality of the application's main feature, so the benefits and impact would have to be carefully evaluated prior to implementation of the map feature.

Another enhancement that could be considered for future updates would be the incorporation of other Day Trip destination location of interest categories. Expanding on the existing categories may provide a benefit to a significant number of users. Additionally, the incorporation of additional travel location categories would help expand GasBuddy's third-party business relationship which would likely increase revenue opportunities.

A final enhancement that could be considered would be allowing the Day Trip feature to provide location suggestions based on the user's search history and travel history. However, the implementation of a suggested location feature would certainly include privacy issues as user data that is not currently collected would have to be logged and user activity tracked. So, careful consideration and evaluation would have to be given before moving forward with the implementation of the suggested location feature.

Project Closure: Implementation Support

Although alpha and beta testing were conducted during the development process, the implementation of the Day Trip feature should be released over several stages that include test markets. Starting with a small populace and gradually transitioning to larger and more densely populated areas to evaluate the viability of the system under the increased load to ensure a

smooth and successful transition as all projects are subject to potential unknown issues. This gradual implementation would allow stakeholders to address any unexpected issues that may require change management.

As feedback is gathered and issues identified, they will be evaluated and categorized to determine the priority level of the issue and whether it is actionable. Issues will be categorized by determining its impact to the functionality of the system. The four categories including critical, major, minor, and trivial. Changes that are categorized and identified as actionable will be submitted to the Change Control Board (CCB) for evaluation and approval.

The change management approach for the Day Trip feature will ensure that all proposed changes are evaluated, and any authorized corrective solution is properly implemented and communicated to all stakeholders. This approach will also ensure that only changes within the scope of this project are approved. The change management approach in this plan will provide the guidelines to manage changes quickly and efficiently.

Upon identifying a potential change issue, the extent of the change solution should be accessed to diminish impact. The optimal change solution will also seek to minimize unnecessary drain of resources to address and implement the change. Additionally, it is important to note that change management must respect and adhere to the boundaries set within the scope of the project. Depending on the impact and type of proposed changes, change amendments to documentation and the communication of these changes will be required. Regardless, all change requests, whether approved or denied, must be entered in to the Change Issue Log to be recorded and tracked.

Project Closure: Maintenance Plan

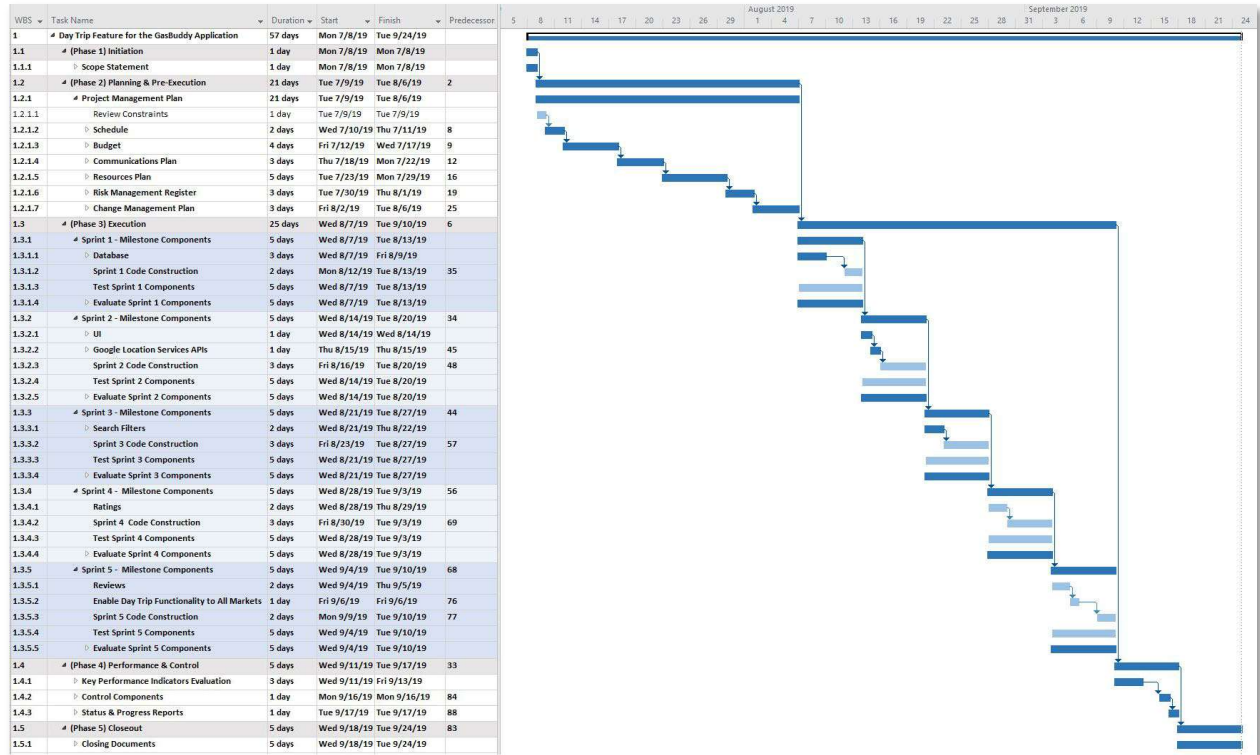
As mentioned previously, the Day Trip feature was intentionally designed and developed to emulate the existing functionality and appearance of the GasBuddy fuel station search feature. This action was planned to mitigate the necessity of additional user training and instruction to operate, manage, and support the new feature designed to be consistent with other existing application features.

The support team that is already providing support for the existing GasBuddy application will already be familiar with the tools, technologies, methods, and strategies required to support and maintain the new Day Trip feature that emulates and are consistent with the current system. The replicate nature of the Day Trip feature that emulates the current GasBuddy system including its intentional consistency allows support personnel to follow existing maintenance plans, policies, and procedures to support the new Day Trip system.

With the Day Trip system successfully completed, many of the development team can be moved back to normal duties and on to other projects; while other team members must continue working with third party vendors to support the new Day Trip system during the transition as the project goes live and after. An example of this with the Day Trip feature is that a support relationship with Amazon Web Services and Google API third party vendors must be maintained during the initial release phase and after the project is released.

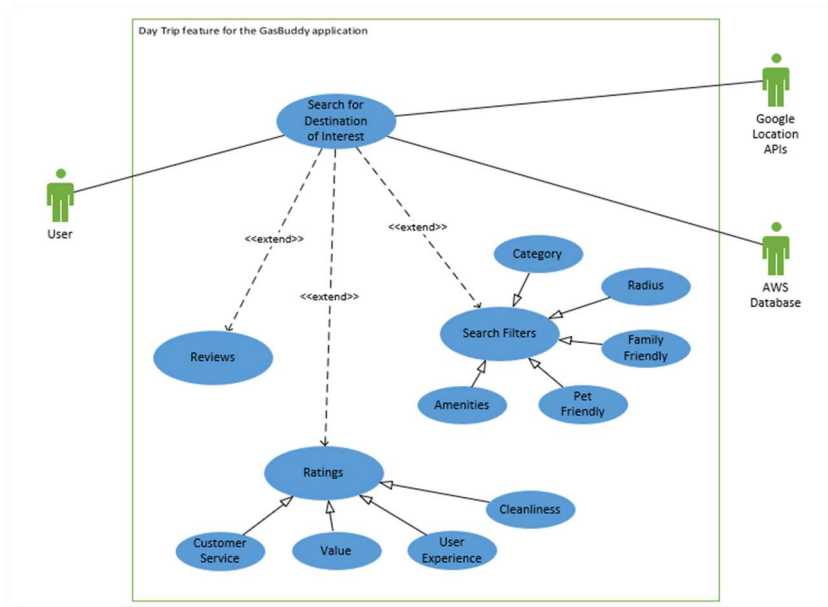
Team members still assigned to the Day Trip project will be responsible to conduct regular system and database backup, restoration, and other security related activities. Additionally, these tasks in addition to modifications and change requests will be managed by the maintenance team on a daily, weekly, and monthly schedule.

Appendix A – Overview of Project Work Breakdown Structure



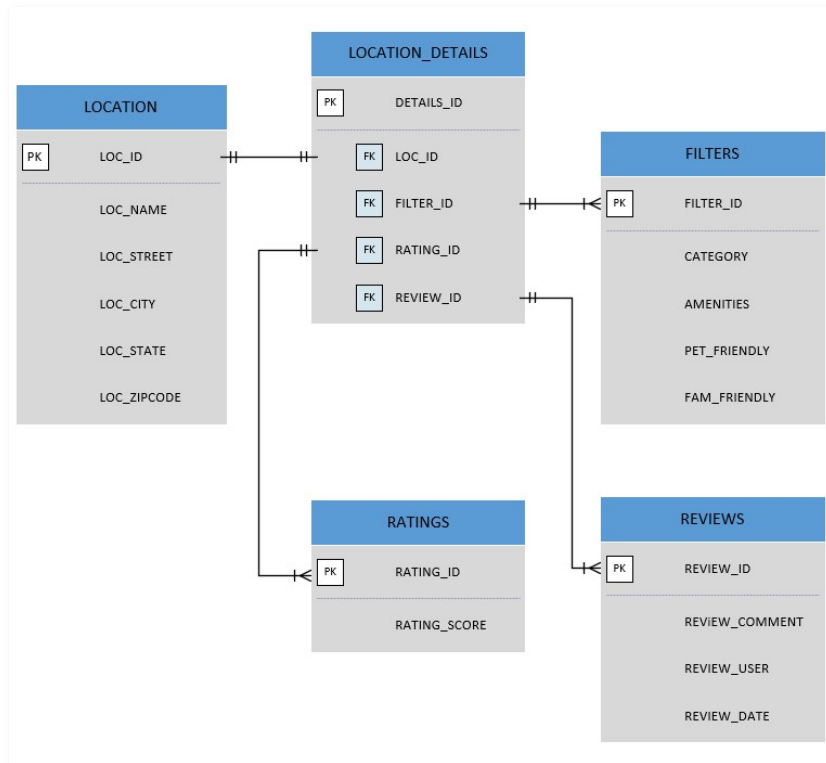
Appendix A - Work Breakdown Structure outlining an overview of the five-phase project life cycle

Appendix B – System UML Use Case Diagram



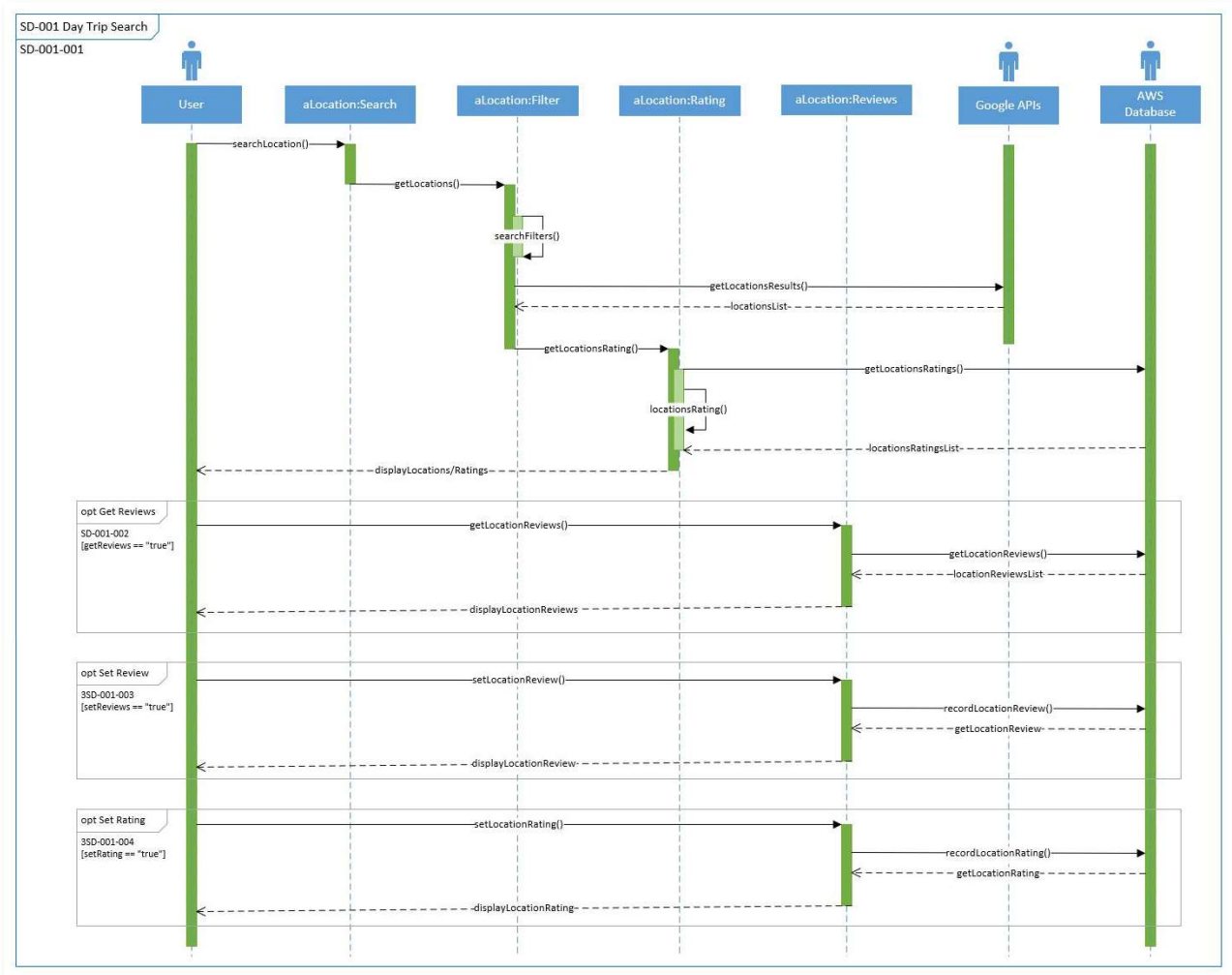
Appendix B - UML use case diagram for the Day Trip system

Appendix C – Database UML Class Diagram



Appendix C - UML class diagram for Day Trip database

Appendix D – System UML Sequence Diagram



Appendix D - UML sequence diagram for the Day Trip system

Appendix E – Screenshot of Prototype Deployed to Test Environment

GasBuddy Day Trip Feature Project Test Environment
 Project Managed and Developed by Joey Chandler
 Build v420 6.4.23

Note: The purpose of this prototype is to demonstrate the functionality of the Day Trip feature system and test case compliance.

The cell phone depicted in this test environment has been scaled vertically to display the entire GasBuddy home page on the screen.

Some existing GasBuddy app features not related to the Day Trip system have not been programmed for this prototype.

JavaScript must be enabled!

Navigation Guide:

Currently displaying GasBuddy home page

Navigate the app using the buttons on the home page or the icon buttons located at the bottom of the app.

Database Query:

Enter database query here:

Submit Query

The Day Trip feature database can be queried here to validate development project test cases.

Example 1: SELECT * FROM 'LOCATION' ORDER BY 'Loc_N'

Example 2: INSERT INTO LOCATION ('Loc_Name') VALUES ('TEST')

Example 3: SELECT Loc_Name, Review_Comment FROM LOCATION, REVIEWS WHERE LOCATION.Loc_ID=REVIEWS.Review_ID

Query Results:

Database Tables and Fields:

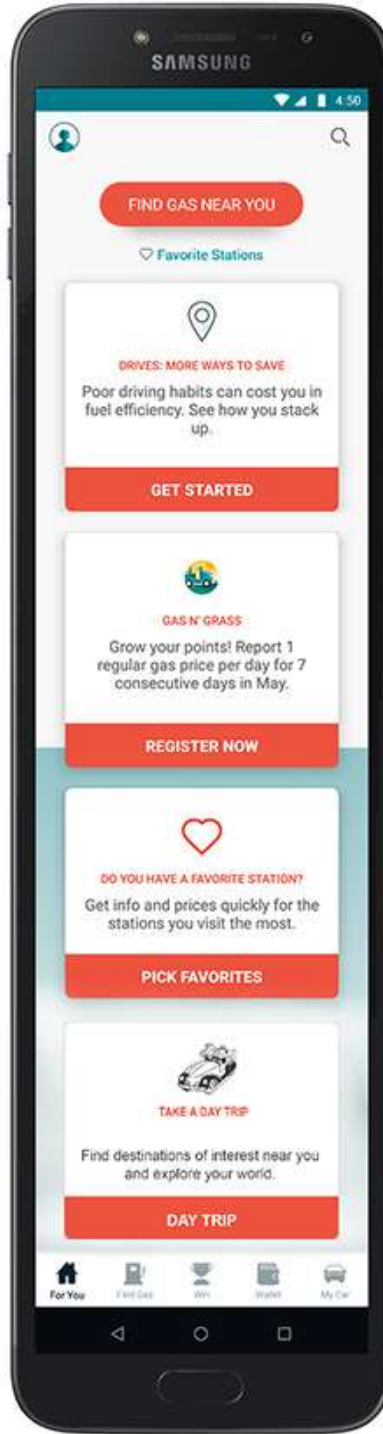
LOCATION
Loc_ID (FK)
Loc_Name
Loc_Street
Loc_City
Loc_State
Loc_ZipCode

LOCATION_DETAILS
Details_ID (FK)
Loc_ID (FK)
Filter_ID (FK)
Rating_ID (FK)
Review_ID (FK)

FILTERS
Filter_ID (FK)
Category
Restrooms
Pet_Friendly
Family_Friendly

REVIEWS
Review_ID (FK)
Review_Comment
Review_User
Review_Date

RATINGS
Rating_ID (FK)
Rating_Score



Joey Chandler
 Southern New Hampshire University
 IT-420 Advanced Information System Implementation
 Final Milestone Project - Day Trip Feature Prototype
 Professor Mahub Chowdhury

Existing home page options

New Day Trip feature option

GasBuddy navigation menu

Appendix E - Screenshot of the Day Trip feature deployed to a test environment

Appendix F – daytrip.js file

```

1 // preload elements //
2 ▼ function addLoadEvent(func) {
3     var oldonload = window.onload;
4     ▼ if (typeof window.onload != 'function') {
5         window.onload = func;
6     ▼ } else {
7     ▼     window.onload = function() {
8     ▼         if (oldonload) {
9             oldonload();
10        }
11        func();
12    }
13 }
14 }
15
16 // home page elements active visible //
17 ▼ function home_screen() {
18     document.getElementById("GB_home_page").style.display = "block";
19     document.getElementById("nav_home_page").style.display = "block";
20     document.getElementById("find_gas_page").style.display = "none";
21     document.getElementById("nav_find_gas_page").style.display = "none";
22     document.getElementById("win_page").style.display = "none";
23     document.getElementById("nav_win_page").style.display = "none";
24     document.getElementById("wallet_page").style.display = "none";
25     document.getElementById("nav_wallet_page").style.display = "none";
26     document.getElementById("car_page").style.display = "none";
27     document.getElementById("nav_car_page").style.display = "none";
28     document.getElementById("nav_btn1_active").style.display = "block";
29     document.getElementById("nav_btn2_active").style.display = "none";
30     document.getElementById("nav_btn3_active").style.display = "none";
31     document.getElementById("nav_btn4_active").style.display = "none";
32     document.getElementById("nav_btn5_active").style.display = "none";
33 }
34
35 // find gas near you page elements active visible //
36 ▼ function find_screen() {
37     document.getElementById("GB_home_page").style.display = "none";
38     document.getElementById("nav_home_page").style.display = "none";
39     document.getElementById("find_gas_page").style.display = "block";
40     document.getElementById("nav_find_gas_page").style.display = "block";
41     document.getElementById("win_page").style.display = "none";
42     document.getElementById("nav_win_page").style.display = "none";
43     document.getElementById("wallet_page").style.display = "none";
44     document.getElementById("nav_wallet_page").style.display = "none";
45     document.getElementById("car_page").style.display = "none";
46     document.getElementById("nav_car_page").style.display = "none";
47     document.getElementById("nav_btn1_active").style.display = "none";
48     document.getElementById("nav_btn2_active").style.display = "block";
49     document.getElementById("nav_btn3_active").style.display = "none";
50     document.getElementById("nav_btn4_active").style.display = "none";
51     document.getElementById("nav_btn5_active").style.display = "none";
52 }
53
54 // win page elements active visible //
55 ▼ function win_screen() {
56     document.getElementById("GB_home_page").style.display = "none";
57     document.getElementById("nav_home_page").style.display = "none";
58     document.getElementById("find_gas_page").style.display = "none";
59     document.getElementById("nav_find_gas_page").style.display = "none";
60     document.getElementById("win_page").style.display = "block";
61     document.getElementById("nav_win_page").style.display = "block";
62     document.getElementById("wallet_page").style.display = "none";
63     document.getElementById("nav_wallet_page").style.display = "none";
64     document.getElementById("car_page").style.display = "none";
65     document.getElementById("nav_car_page").style.display = "none";

```

Appendix F – daytrip.js Day Trip script deployed to test environment

Appendix F – daytrip.js file (continued)

```

66     document.getElementById("nav_btn1_active").style.display = "none";
67     document.getElementById("nav_btn2_active").style.display = "none";
68     document.getElementById("nav_btn3_active").style.display = "block";
69     document.getElementById("nav_btn4_active").style.display = "none";
70     document.getElementById("nav_btn5_active").style.display = "none";
71 }
72
73 // wallet page elements active visible //
74 function wallet_screen() {
75     document.getElementById("GB_home_page").style.display = "none";
76     document.getElementById("nav_home_page").style.display = "none";
77     document.getElementById("find_gas_page").style.display = "none";
78     document.getElementById("nav_find_gas_page").style.display = "none";
79     document.getElementById("win_page").style.display = "none";
80     document.getElementById("nav_win_page").style.display = "none";
81     document.getElementById("wallet_page").style.display = "block";
82     document.getElementById("nav_wallet_page").style.display = "block";
83     document.getElementById("car_page").style.display = "none";
84     document.getElementById("nav_car_page").style.display = "none";
85     document.getElementById("nav_btn1_active").style.display = "none";
86     document.getElementById("nav_btn2_active").style.display = "none";
87     document.getElementById("nav_btn3_active").style.display = "none";
88     document.getElementById("nav_btn4_active").style.display = "block";
89     document.getElementById("nav_btn5_active").style.display = "none";
90 }
91
92 // car page elements active visible //
93 function car_screen() {
94     document.getElementById("GB_home_page").style.display = "none";
95     document.getElementById("nav_home_page").style.display = "none";
96     document.getElementById("find_gas_page").style.display = "none";
97     document.getElementById("nav_find_gas_page").style.display = "none";
98     document.getElementById("win_page").style.display = "none";
99     document.getElementById("nav_win_page").style.display = "none";
100    document.getElementById("wallet_page").style.display = "none";
101    document.getElementById("nav_wallet_page").style.display = "none";
102    document.getElementById("car_page").style.display = "block";
103    document.getElementById("nav_car_page").style.display = "block";
104    document.getElementById("nav_btn1_active").style.display = "none";
105    document.getElementById("nav_btn2_active").style.display = "none";
106    document.getElementById("nav_btn3_active").style.display = "none";
107    document.getElementById("nav_btn4_active").style.display = "none";
108    document.getElementById("nav_btn5_active").style.display = "block";
109 }
110
111 // preload button images //
112 function preloader() {
113     if (document.images) {
114         var img1 = new Image();
115         var img2 = new Image();
116         var img3 = new Image();
117         var img4 = new Image();
118         var img5 = new Image();
119         var img6 = new Image();
120         var img7 = new Image();
121         var img8 = new Image();
122         var img9 = new Image();
123         var img10 = new Image();
124         var img11 = new Image();
125         var img12 = new Image();
126         var img13 = new Image();
127         var img14 = new Image();
128         var img15 = new Image();
129         var img16 = new Image();

```

Appendix F – daytrip.js Day Trip script deployed to test environment (continued)

Appendix F – daytrip.js file (continued)

```
130
131
132     img1.src = "http://tampajoey.com/daytrip/get_started_btn1.jpg";
133     img2.src = "http://tampajoey.com/daytrip/get_started_btn2.jpg";
134     img3.src = "http://tampajoey.com/daytrip/find_gas_near_you_btn.png";
135     img4.src = "http://tampajoey.com/daytrip/find_gas_near_you_btn2.png";
136     img5.src = "http://tampajoey.com/daytrip/get_started_btn1.jpg";
137     img6.src = "http://tampajoey.com/daytrip/get_started_btn2.jpg";
138     img7.src = "http://tampajoey.com/daytrip/day_trip_btn1.jpg";
139     img8.src = "http://tampajoey.com/daytrip/day_trip_btn2.jpg";
140     img9.src = "http://tampajoey.com/daytrip/pick_favorites_btn1.jpg";
141     img10.src = "http://tampajoey.com/daytrip/pick_favorites_btn2.jpg";
142     img11.src = "http://tampajoey.com/daytrip/register_now_btn1.jpg";
143     img12.src = "http://tampajoey.com/daytrip/register_now_btn2.jpg";
144     img13.src = "http://tampajoey.com/daytrip/find_gas_screen.png";
145     img14.src = "http://tampajoey.com/daytrip/win_screen.png";
146     img15.src = "http://tampajoey.com/daytrip/wallet_screen.png";
147     img16.src = "http://tampajoey.com/daytrip/car_screen.png";
148
149 }
150 }
```

Appendix F – daytrip.js Day Trip script deployed to test environment (continued)

Appendix G – constants.php file

```
1 <?php
2
3 // database constants
4 define("DB_SERVER", "45.40.164.64");
5 define("DB_USER", "DayTrip");
6 define("DB_PASS", "Bailey#1");
7 define("DB_NAME", "DayTrip");
8
9 ?>
```

Appendix G – constants.php Day Trip script deployed to test environment

Appendix H – connection.php file

```
1 <?php
2 require_once("constants.php");
3
4 $servername = DB_SERVER;
5 $username = DB_USER;
6 $password = DB_PASS;
7 $dbname = DB_NAME;
8
9 // PDO connection to database
10 //$conn = new PDO("mysql:host=$servername;dbname=$dbname", $username, $password);
11
12 // MySQLi connection to database
13 $conn = mysqli_connect($servername,$dbname,$password,$username) or die("Error connecting to Database");
14 ?>
```

Appendix H – constants.php Day Trip script deployed to test environment

Appendix I - index.php file

```

1 <!doctype html>
2 <html>
3 <head>
4 <title>Day Trip Project Test Enviornment</title>
5 <link rel="stylesheet" type="text/css" href="daytrip.css">
6 <script type="text/javascript" src="daytrip.js"></script>
7 </head>
8 <body>
9 <!-- database connection -->
10 <?php include "connection.php"; ?>
11
12 <div id="wrapper">
13 <div id="vertbar1">
14 <div class="title">GasBuddy Day Trip Feature Project Test Environment</div>
15 <div class="content">Project Managed and Developed by Joey Chandler</div>
16 <div class="build_version">Build v420.6.4.23</div>
17 <div class="note">Note: The purpose of this prototype is to demonstrate the functionality of
the Day Trip feature system and test case compliance.<br/><br/>The cell phone depicted in
this test environment has been scaled vertically to display the entire GasBuddy home page on
the screen.<br/><br/>Some existing GasBuddy app features not related to the Day Trip system
have not been programmed for this prototype.<br/><br/>JavaScript must be enabled.</div>
18
19 <!-- navigation guide in vertical bar 1 -->
20 <div id="navigation"><span class="navigation">Navigation Guide:</span>
21 <div id="nav_home_page">Currently displaying GasBuddy <b>home page</b></div>
22 <div id="nav_find_gas_page" style="display: none;">Currently displaying GasBuddy
<b>find gas near you page</b></div>
23 <div id="nav_win_page" style="display: none;">Currently displaying GasBuddy <b>contest
'win' page</b></div>
24 <div id="nav_wallet_page" style="display: none;">Currently displaying GasBuddy
<b>wallet page</b></div>
25 <div id="nav_car_page" style="display: none;">Currently displaying GasBuddy <b>car
page</b></div>
26
27 <div id="nav_day_trip_page" style="display: none;">Currently displaying GasBuddy
<b>day trip page</b></div>
28
29 <!-- navigation instructions -->
30 <div class="nav_instructions">Navigate the app using the buttons on the home
page<br/>or the icon buttons located at the bottom of the app.</div>
31 </div>
32
33 <!-- database query area -->
34 <div id="query_box"><span class="query_box">Database Query:</span>
35
36 <form method="post" action="">
37
38 <div id="textarea"><textarea name="query" placeholder="Enter database query here"
class="textarea"></textarea></div>
39 <input type="submit" value="Submit Query">
40 </form>
41
42 <div id="query_instructions">The Day Trip feature database can be queried here to validate
development project test cases.<br/><br/>Example 1: SELECT * FROM 'LOCATION' ORDER BY
'Loc_Id'<br/><br/>Example 2: INSERT INTO LOCATION ('Loc_Name') VALUES ('TEST')<br/>
<br/>Example 3: SELECT Loc_Name, Review_Comment FROM LOCATION, REVIEWS WHERE
LOCATION.Loc_Id=REVIEWS.Review_Id</div>
43 </div>
44
45 <div id="results_box"><span class="query_box">Query Results:</span>
46 <div class="query_results"><span class="results">
47 <?php
48 $results="";
49
50 if (stripos($_POST["query"], "insert")>-1){
51

```

Appendix I – index.php Day Trip script deployed to test environment

Appendix I - index.php file (continued)

```

52         // INSERT found --- insert to DB
53         mysqli_query($conn,$_POST["query"]);
54
55     }else{
56
57         if ($_POST["query"] != "") {
58
59             $sql = ($_POST["query"]);
60
61             $results = mysqli_query($conn, $sql);
62
63             if ($results != ""){
64                 $count = 1;
65
66                 while($row = mysqli_fetch_assoc($results)){
67                     echo "***** Row ",$count," *****
68                     <br/>";
69                     print_r($row);
70                     $count++;
71                     echo "<br/><br/>";
72                 }
73             }else{
74                 echo "<span class='query_error'>Bad query entered... please try
75                 again</span><br><br><span class='query_error'>Query tables and fields
76                 are case sensitive</span>";
77             }
78         }
79     </span>
80 </div>
81 </div>
82
83 <!-- tables and fields -->
84 <div id="table_fields"><span class="tables_fields">Database Tables and Fields:</span>
85 <div class="Location">
86     <ul class="table">LOCATION</ul>
87     <ul>Loc_Id (PK)</ul>
88     <ul>Loc_Name</ul>
89     <ul>Loc_Street</ul>
90     <ul>Loc_City</ul>
91     <ul>Loc_State</ul>
92     <ul>Loc_ZipCode</ul>
93 </div>
94 <div class="Location_Details">
95     <ul class="table">LOCATION_DETAILS</ul>
96     <ul>Details_Id (PK)</ul>
97     <ul>Loc_Id (FK)</ul>
98     <ul>Filter_Id (FK)</ul>
99     <ul>Rating_Id (FK)</ul>
100    <ul>Review_Id (FK)</ul>
101 </div>
102 <div class="Filters">
103     <ul class="table">FILTERS</ul>
104     <ul>Filter_Id (PK)</ul>
105     <ul>Category</ul>
106     <ul>Restroom</ul>
107     <ul>Pet_Friendly</ul>
108     <ul>Family_Friendly</ul>
109 </div>
110 <div class="Ratings">
111     <ul class="table">RATINGS</ul>
112     <ul>Rating_Id (PK)</ul>
113     <ul>Rating_Score</ul>

```

Appendix I – index.php Day Trip script deployed to test environment (continued)

Appendix I - index.php file (continued)

```

114         </div>
115 ▼         <div class="Reviews">
116             <ul class="table">REVIEWS</ul>
117             <ul>Review_Id (PK)</ul>
118             <ul>Review_Comment</ul>
119             <ul>Review_User</ul>
120             <ul>Review_Date</ul>
121         </div>
122
123     </div>
124
125 </div>
126 ▼ <div id="vertbar2">
127
128     <!-- cell phone layout-->
129     <div></div>
130
131     <!-- GasBuddy Navigation Buttons @ Bottom of the Screen -->
132     <div class="nav_btn1" onclick="home_screen()"></div>
133     <div id="nav_btn1_active" class="nav_btn1_active"></div>
134
135     <div class="nav_btn2" onclick="find_screen()"></div>
136
137     <div id="nav_btn2_active" class="nav_btn2_active" style="display: none;"></div>
138
139     <div class="nav_btn3" onclick="win_screen()"></div>
140     <div id="nav_btn3_active" class="nav_btn3_active" style="display: none;"></div>
141
142     <div class="nav_btn4" onclick="wallet_screen()"></div>
143
144     <div id="nav_btn4_active" class="nav_btn4_active" style="display: none;"></div>
145
146     <div class="nav_btn5" onclick="car_screen()"></div>
147
148     <div id="nav_btn5_active" class="nav_btn5_active" style="display: none;"></div>
149
150     <!-- GasBuddy Home Page -->
151     <div id="GB_home_page">
152         <div class="app_page"></div>
153         <!-- search icon button -->
154         <div class="search_btn" onclick="find_screen()"></div>
156         <!-- find gas near you button -->
157         <div class="home_btn1"><div class="find_btn" onclick="find_screen()"></div></div>
158         <!-- start reporting button -->
159         <div class="home_btn2"><div class="get_started_btn" onclick="car_screen()"></div></div>
160         <!-- register now button -->
161         <div class="home_btn3"><div class="register_now_btn" onclick="win_screen()"></div></div>
162         <!-- pick favorites button -->
163         <div class="home_btn4"><div class="pick_favorites_btn" onclick="find_screen()"></div>
164         </div>
165         <!-- day trip button -->
166         <div class="home_btn5"><div class="day_trip_btn" onclick="day_trip_screen()"></div></div>
167
168     </div>
169
170     <!-- GasBuddy Find Gas Screen -->
171     <div id="find_gas_page" style="display: none;">
172         <div class="app_page"></div>
173     </div>
174
175     <!-- GasBuddy Win Screen -->
176     <div id="win_page" style="display: none;">
177         <div class="app_page"></div>
178     </div>

```

Appendix I – index.php Day Trip script deployed to test environment (continued)

Appendix I - index.php file (continued)

```

173
174
175 ▾ <!-- GasBuddy Wallet Screen -->
176 <div id="wallet_page" style="display: none;">
177   <div class="app_page"></div>
178 </div>
179
180 ▾ <!-- GasBuddy Car Screen -->
181 <div id="car_page" style="display: none;">
182   <div class="app_page"></div>
183 </div>
184
185 ▾ <!-- GasBuddy Day Trip Screen -->
186 <div id="day_trip_page" style="display: none;">
187   <div class="app_page">Day Trip Screen</div>
188 </div>
189 </div>
190 ▾ <div id="vertbar3">
191
192   <!-- vertical bar 3 content -->
193   <!-- title header information-->
194 ▾   <div class="title_box">
195     <div class="content2">Joey Chandler</div>
196     <div class="content2">Southern New Hampshire University</div>
197     <div class="content2">IT-420 Advanced Information System Implementation</div>
198     <div class="content2">Final Milestone Project - Day Trip Feature Prototype</div>
199     <div class="content2">Professor Mahbub Chowdhury</div>
200   </div>
201   <!-- home guide bracket -->
202   <div id="home_guide_bkt"></div>
203   <div id="home_guide_bkt1_desc">Existing home page options</div>
204   <div id="home_guide_bkt2_desc">New Day Trip feature option</div>
205
206   <!-- navigation buttons guide bracket -->
207   <div id="nav_guide_bkt"></div>
208   <div id="home_guide_bkt3_desc">GasBuddy navigation menu</div>
209 </div>
210 </div>
211
212 <!-- preload images function -->
213 <script>addLoadEvent(preloader);</script>
214
215 </body>
216 </html>

```

Appendix I – index.php Day Trip script deployed to test environment (continued)

Appendix J – daytrip.css file

```
1  /* CSS Document */
2
3  ▼ body {
4      padding:0px;
5      margin:0px;
6  }
7
8  ▼ #wrapper {
9      width:98%;
10     min-width: 1336px;
11     margin:0 auto;
12     overflow:hidden;
13     float:left;
14     border: 0px solid #FF0000;
15     margin-left: 10px;
16     margin-top: 6px;
17 }
18
19 ▼ #container {
20     width:100%;
21     float:left;
22     border: 0px solid #FF0000;
23 }
24
25 ▼ #vertbar1 {
26     float:left;
27     width:34%;
28 }
29
30 ▼ #vertbar2 {
31     float:left;
32     position:relative;
33 }
34
35 ▼ #vertbar3 {
36     float:left;
37     margin-left:46px;
38     width:30%;
39     position:relative;
40 }
41
42 ▼ .title_box {
43     margin-left: 44px;
44 }
45
46 ▼ .title {
47     margin:0px;
48     padding-left:4px;
49     padding-top:4px;
50     font-size:28px;
51     color:#4F4968;
52     font-family:Impact, Haettenschweiler, "Franklin Gothic Bold", "Arial Black", "sans-serif";
53     text-decoration:none;
54     font-weight: 500;
55 }
56
57 ▼ .build_version {
58     padding-left:4px;
59     padding-top:8px;
60     font-size:11px;
61     color:#676F9E;
62     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
63     text-decoration:none;
64 }
```

Appendix J – daytrip.css Day Trip script deployed to test environment

Appendix J – daytrip.css file (continued)

```
65
66 ▼ .content {
67     margin:0px;
68     padding-left:4px;
69     padding-top:2px;
70     font-size:14px;
71     color:#4F496B;
72     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
73     text-decoration:none;
74 }
75
76 ▼ .content2 {
77     margin:0px;
78     padding-top:4px;
79     font-size:14px;
80     color:#4F496B;
81     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
82     text-decoration:none;
83 }
84
85 ▼ .note {
86     width:330px;
87     margin:0px;
88     margin-left:46px;
89     margin-top:44px;
90     font-size:14px;
91     color:#FF0000;
92     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
93     text-decoration:none;
94     font-style: italic;
95 }
96
97 ▼ #textarea {
98     margin-left: 13px;
99     margin-top: 6px;
100 }
101
102 ▼ .textarea {
103     padding-left: 4px;
104     resize: none;
105     outline: none;
106     border: 1px solid #4F496B;
107     overflow: auto;
108     width: 350px;
109     height: 60px;
110     font-size:12px;
111     color:#000000;
112     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
113     text-decoration:none;
114 }
115
116 ▼ .query_results {
117     resize: none;
118     overflow: auto;
119     width: 350px;
120     height: 180px;
121     margin-left: 13px;
122     margin-top: 6px;
123     border: 1px solid #4F496B;
124 }
125
126 ▼ .results {
```

Appendix J – daytrip.css Day Trip script deployed to test environment (continued)

Appendix J – daytrip.css file (continued)

```
127     font-size:12px;
128     color:#000000;
129     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
130     text-decoration:none;
131 }
132
133 #query_instructions {
134     margin-top: 10px;
135     margin-left: 13px;
136     width:380px;
137     font-size:11px;
138     color:#4F4968;
139     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
140     text-decoration:none;
141 }
142
143 .query_error {
144     padding-left: 4px;
145     font-size:13px;
146     color:#FF0000;
147     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
148     text-decoration:none;
149     font-style: italic;
150     font-weight: 700;
151 }
152
153 .nav_btn1{
154     position:absolute;
155     left: 46px;
156     top: 1364px;
157     z-index: 2;
158 }
159
160 .nav_btn2{
161     position:absolute;
162     left: 118px;
163     top: 1364px;
164     z-index: 2;
165 }
166
167 .nav_btn3{
168     position:absolute;
169     left: 190px;
170     top: 1364px;
171     z-index: 2;
172 }
173
174 .nav_btn4{
175     position:absolute;
176     left: 262px;
177     top: 1364px;
178     z-index: 2;
179 }
180
181 .nav_btn5{
182     position:absolute;
183     left: 334px;
184     top: 1364px;
185     z-index: 2;
186 }
187
188 .nav_btn1_active {
189     position:absolute;
190     left: 48px;
```

Appendix J – daytrip.css Day Trip script deployed to test environment (continued)

Appendix J – daytrip.css file (continued)

```
191     top: 1364px;
192     z-index: 2;
193     width: 37px;
194     height: 44px;
195     background: url("home2.png") no-repeat;
196 }
197
198 ▼ .nav_btn2_active {
199     position: absolute;
200     left: 118px;
201     top: 1364px;
202     z-index: 2;
203     width: 37px;
204     height: 44px;
205     background: url("find2.png") no-repeat;
206 }
207
208 ▼ .nav_btn3_active {
209     position: absolute;
210     left: 195px;
211     top: 1366px;
212     z-index: 2;
213     width: 37px;
214     height: 44px;
215     background: url("win2.png") no-repeat;
216 }
217
218 ▼ .nav_btn4_active {
219     position: absolute;
220     left: 265px;
221     top: 1364px;
222     z-index: 2;
223     width: 37px;
224     height: 44px;
225     background: url("wallet2.png") no-repeat;
226 }
227
228 ▼ .nav_btn5_active {
229     position: absolute;
230     left: 334px;
231     top: 1364px;
232     z-index: 2;
233     width: 37px;
234     height: 44px;
235     background: url("car2.png") no-repeat;
236 }
237
238 ▼ .search_btn {
239     position: absolute;
240     left: 346px;
241     top: 138px;
242     z-index: 2;
243 }
244
245 ▼ .home_btn1 {
246     position: absolute;
247     left: 99px;
248     top: 192px;
249 }
250
251 ▼ .home_btn2 {
252     position: absolute;
253     left: 64px;
254     top: 508px;
```

Appendix J – daytrip.css Day Trip script deployed to test environment (continued)

Appendix J – daytrip.css file (continued)

```
255 }
256
257 ▼ .home_btn3 {
258     position: absolute;
259     left: 64px;
260     top: 776px;
261 }
262
263 ▼ .home_btn4 {
264     position: absolute;
265     left: 64px;
266     top: 1833px;
267 }
268
269 ▼ .home_btn5 {
270     position: absolute;
271     left: 63px;
272     top: 1294px;
273 }
274
275 ▼ .nav_btn1: hover, .nav_btn2: hover, .nav_btn3: hover, .nav_btn4: hover, .nav_btn5: hover, .search_btn {
276     cursor: pointer;
277 }
278
279 ▼ .app_page {
280     position: absolute;
281     left: 32px;
282     top: 92px;
283 }
284
285 ▼ .nav_blank{
286     width: 40px;
287     height: 42px;
288 }
289
290 ▼ .find_btn {
291     width: 223px;
292     height: 50px;
293     background: url(find_gas_near_you_btn.png) no-repeat;
294 }
295
296 ▼ .find_btn: hover {
297     width: 223px;
298     height: 50px;
299     cursor: pointer;
300     background: url(find_gas_near_you_btn2.png) no-repeat;
301 }
302
303 ▼ .get_started_btn {
304     width: 294px;
305     height: 48px;
306     background: url(get_started_btn1.jpg) no-repeat;
307 }
308
309 ▼ .get_started_btn: hover {
310     width: 294px;
311     height: 48px;
312     cursor: pointer;
313     background: url(get_started_btn2.jpg) no-repeat;
314 }
315
316 ▼ .register_now_btn {
317     width: 294px;
```

Appendix J – daytrip.css Day Trip script deployed to test environment (continued)

Appendix J – daytrip.css file (continued)

```
318     height: 48px;
319     background: url(register_now_btn1.jpg) no-repeat;
320 }
321
322 ▼ .register_now_btn:hover {
323     width: 294px;
324     height: 48px;
325     cursor: pointer;
326     background: url(register_now_btn2.jpg) no-repeat;
327 }
328
329 ▼ .pick_favorites_btn {
330     width: 294px;
331     height: 48px;
332     background: url(pick_favorites_btn1.jpg) no-repeat;
333 }
334
335 ▼ .pick_favorites_btn:hover {
336     width: 294px;
337     height: 48px;
338     cursor: pointer;
339     background: url(pick_favorites_btn2.jpg) no-repeat;
340 }
341
342 ▼ .day_trip_btn {
343     width: 295px;
344     height: 46px;
345     background: url(day_trip_btn1.jpg) no-repeat;
346 }
347
348 ▼ .day_trip_btn:hover {
349     width: 295px;
350     height: 46px;
351     cursor: pointer;
352     background: url(day_trip_btn2.jpg) no-repeat;
353 }
354
355 ▼ #navigation, #query_box, #results_box, #table_fields {
356     margin-top: 46px;
357     margin-left: 23px;
358     padding-right: 23px;
359 }
360
361
362 ▼ .navigation, .query_box, .results_box, .tables_fields {
363     font-size:15px;
364     color:#4F4968;
365     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
366     text-decoration:none;
367     font-weight: 700;
368 }
369
370 ▼ #nav_home_page, #nav_find_gas_page, #nav_win_page, #nav_wallet_page, #nav_car_page {
371     margin:0px;
372     padding-left:13px;
373     padding-top:4px;
374     font-size:14px;
375     color:#4F4968;
376     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
377     text-decoration:none;
378 }
379
380 ▼ .nav_instructions {
```

Appendix J – daytrip.css Day Trip script deployed to test environment (continued)

Appendix J – daytrip.css file (continued)

```
381 padding-left:13px;
382 padding-top:20px;
383 font-size:14px;
384 color:#4F496B;
385 font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
386 text-decoration:none;
387 }
388
389 ▼ #home_guide_bkt {
390 position:absolute;
391 left: -40px;
392 top: 116px;
393 width: 70px;
394 height: 1237px;
395 background: url(home_bkt.png) no-repeat;
396 }
397 ▼ #nav_guide_bkt {
398 position:absolute;
399 left: -40px;
400 top: 1350px;
401 width: 70px;
402 height: 107px;
403 background: url(nav_bkt.png) no-repeat;
404 }
405
406 ▼ #home_guide_bkt1_desc {
407 position:absolute;
408 left: 38px;
409 top: 606px;
410 font-size:14px;
411 color:#4F496B;
412 font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
413 text-decoration:none;
414 }
415
416 ▼ #home_guide_bkt2_desc {
417 position:absolute;
418 left: 38px;
419 top: 1218px;
420 font-size:14px;
421 color:#4F496B;
422 font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
423 text-decoration:none;
424 }
425
426 ▼ #home_guide_bkt3_desc {
427 position:absolute;
428 left: 38px;
429 top: 1376px;
430 font-size:14px;
431 color:#4F496B;
432 font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
433 text-decoration:none;
434 }
435
436 ▼ input[type=submit] {
437 background-color:#A2A2A2;
438 border: none;
439 color:#00001F;
440 padding: 8px 16px;
441 text-decoration: none;
442 margin: 4px 0px;
443 margin-left: 13px;
444 cursor: pointer;
```

Appendix J – daytrip.css Day Trip script deployed to test environment (continued)

Appendix J – daytrip.css file (continued)

```
445     font-size: 12px;
446   }
447
448   ul {
449     list-style-type: none;
450     margin: 0;
451     padding-top: 4px;
452     padding-bottom: 4px;
453     padding-left: 14px;
454     border: 1px solid #4F496B;
455     width: 140px;
456     font-size: 11px;
457     color: #4F496B;
458     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
459     text-decoration: none;
460     font-weight: 500;
461   }
462
463   .table {
464     font-family: Gotham, "Helvetica Neue", Helvetica, Arial, "sans-serif";
465     text-decoration: none;
466     font-weight: 800;
467   }
468
469   .Location, .Filters, .Ratings {
470     margin-top: 10px;
471     margin-left: 23px;
472     margin-bottom: 10px;
473   }
474
475   .Location_Details {
476     position: absolute;
477     left: 242px;
478     top: 1104px;
479     z-index: 2;
480   }
481
482   .Reviews {
483     position: absolute;
484     left: 242px;
485     top: 1203px;
486     z-index: 2;
487   }
```

Appendix J – daytrip.css Day Trip script deployed to test environment (continued)

References

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