GoWhere

by

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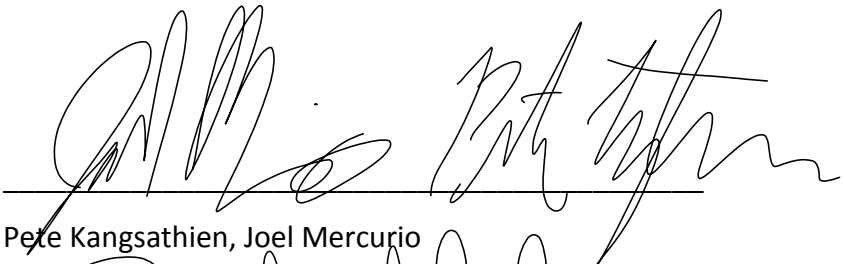

_____ Date: 4/18/16

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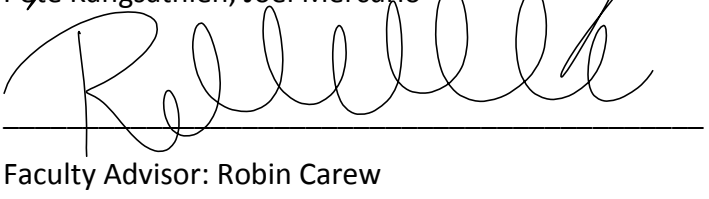

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Abstract

GoWhere is a social utility application that aims to remove disorganization and uncertainty from event planning. Through the usage of social media integration, friends, families, and colleagues can stay connected on any platform. GoWhere also has the option to open up events to strangers to meet new people. Each event can be sent to specific individuals or pre-defined groups. With the integration of the Google Maps API, users will have the ability to set and share location-based notifications. GoWhere can be used to plan events days in advance, or even at the last minute. Within the GoWhere application, each event will have a chatroom available to the individuals invited to the event. GoWhere has the potential to become an innovative social platform for creating and maintaining relationships with your peers.

Introduction

In a world where technology is integrated with everything, social interactions are limited and more people resort to relationship maintenance through virtual mediums. Simply trying to make plans to meetup with peers has turned into a convoluted stressful process. It can be impossible to coordinate everyone's schedule, availability, calculating headcount, and more. By the time everyone is finally able to get together, participants are exhausted by all the disorganization. GoWhere is a social utility application that aims to mitigate these problems with event planning.

Problem

There is currently no reliable way to schedule and plan events with others in a single consolidated platform. With people relying on different mediums such as e-mail, social media, text messaging, and more, uncertainty and disorganization tends to be a common issue. By reducing the amount of redundancy and streamlining all communication into a single platform, this issue can be erased. Planning can be a hassle and often times discourages people from meeting up due to the sheer difficulty of coordination. On top of this, acquiring an accurate head count, timing, and last minute event changes can be near impossible.

Solution

Through the usage of social media integration, friends, families, and colleagues can stay connected on any platform. GoWhere also has the option to open up events to the public so users can meet new people. Each event can be sent to specific individuals or pre-defined

groups. With the integration of the Google Maps API, users will have the ability to set and share location-based notifications. GoWhere can be used to plan events days in advance, or even at the last minute. Within the GoWhere application, each event will have a chatroom available to the individuals invited to the event. GoWhere has the potential to become an innovative social platform for creating and maintaining relationships with your peers.

Our project will leverage the power of meteor.js to develop a responsive cross-platform application that will be compatible with iOS, Android, and desktop. We will be maintaining our code in a Bit Bucket repository throughout the course of development. Our application and data hosting solution will be supported by MongoDB and MongoLabs. We will incorporate the Google Maps API to assist us in the development of the location-based interface which our application will be centered around. We will also incorporate social media integration with Facebook, Twitter, Instagram, etc. Upon completion of this product, we hope to be able to pursue market deployment.

User Profile

There are going to be two potential user groups that will interact with GoWhere. These include the end users and the application administrators.

End Users

The end users will be everyday users of the GoWhere application. These users will access the application from their Android or iOS mobile devices, or from a web browser on a computer. Android users will have to install the application through The Google Play Store and iOS users will install from the App Store. These application installations

will be free to the end user. The end users will be able to perform all event planning functionality on this application. They will also be able to specify their settings for event sharing as well as user-group specifications.

Application Administrators

The application administrators will consist of Pete Kangsathien and Joel Mercurio for the time being. These users will perform maintenance, upkeep, and improvement of the application based on the needs, requests, and feedback of the end users. All administrative tasks surrounding GoWhere will be performed by these users. They will have the ability to control everything in the application environment.

Software and Interface Experience

Users will interact with a location-based interface featuring a “Google Maps” map on the main screen on the application. From here, end users will be able to perform all application functions. They will also be able to navigate to additional application features such as the settings, event logs, etc.

Task Experience

The user will open the application, pinpoint an event location, and provide dates, times, and any additional descriptions. The user will then specify recipients of the notification and send it out.

Frequency of Use

Users will likely use the application on a weekly basis to schedule events with friends, families, colleagues, and even strangers. There is no limit to the amount you can use the

application. Frequent users may use the application multiples times within a day while inactive users may use it once a month. The average user is expected to utilize the application a few times a week.

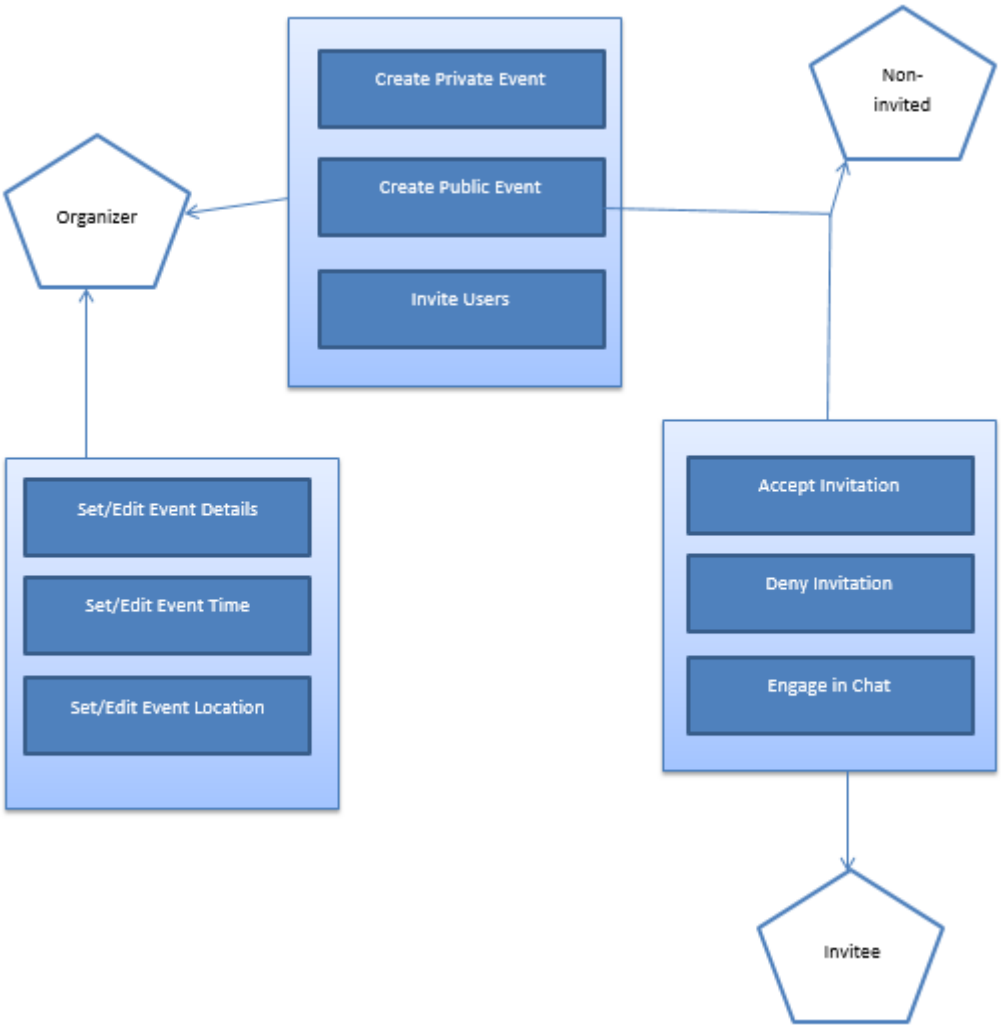


Figure 1: Use Case Diagram

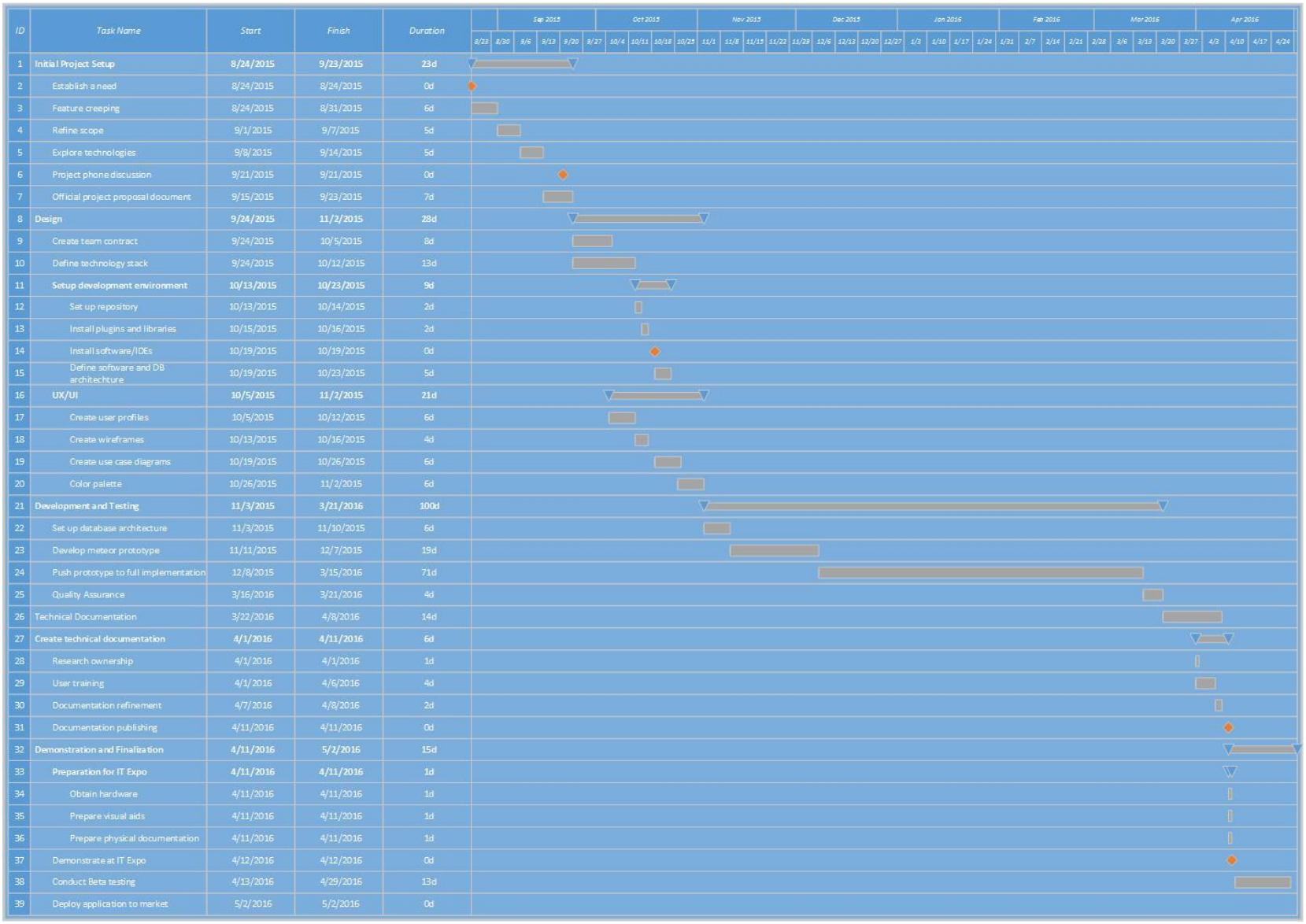
Timeline

The following (Figure 2) depicts the timeline for completing this project.

Phase	Tasks	Subtasks	Start Date	End Date
Initial Project Setup			08/24/15	09/23/15
	Establish a need		08/24/15	08/24/15
	Feature creeping		08/24/15	08/31/15
	Refine scope		09/01/15	09/07/15
	Explore technologies		09/08/15	09/14/15
	Project phone discussion		09/20/15	09/20/15
	Official project proposal document		09/15/15	09/23/15
Design			09/24/15	11/02/15
	Create team contract		09/24/15	10/05/15
	Define technology stack		09/24/15	10/12/15
	Setup development environment		10/13/15	10/23/15
		Set up repository	10/13/15	10/14/15
		Install plugins and libraries	10/15/15	10/16/15
		Install software/IDEs	10/17/15	10/18/15
		Define software and DB architecture	10/19/15	10/23/15
	UX/UI		10/05/15	11/02/15
		Create user profiles	10/05/15	10/12/15
		Create wireframes	10/13/15	10/18/15
		Create use case diagrams	10/19/15	10/26/15
		Color palette	10/26/15	11/02/15
Development and Testing			11/03/15	03/21/16
	Set up database architecture		11/03/15	11/10/15
	Develop Meteor prototype		11/11/15	12/07/15

	Push prototype to full implementation		12/08/15	03/15/16
	Quality Assurance		03/16/16	03/21/16
Technical Documentation			03/22/16	04/09/16
	Create technical documentation		03/22/16	03/31/16
	Research ownership		04/01/16	04/03/16
	User training		04/01/16	04/06/16
	Documentation refinement		04/07/16	04/08/16
	Documentation publishing		04/09/16	04/09/16
Demonstration and Finalization			04/09/16	05/02/16
	Preparation for IT Expo		04/09/16	04/11/16
		Obtain hardware	04/09/16	04/11/16
		Prepare visual aids	04/09/16	04/11/16
		Prepare physical documentation	04/09/16	04/11/16
	Demonstrate at IT Expo		04/12/16	04/12/16
	Conduct Beta testing		04/13/16	05/01/16
	Deploy application to market		05/02/16	05/02/16

Figure 2: Project Timeline



ID	Task Name	Start	Finish	Duration
1	**Initial Project Setup**	**8/24/2015**	**9/23/2015**	**23d**
2	Establish a need	8/24/2015	8/24/2015	0d
3	Feature creeping	8/24/2015	8/31/2015	6d
4	Refine scope	9/1/2015	9/7/2015	5d
5	Explore technologies	9/8/2015	9/14/2015	5d
6	Project phone discussion	9/21/2015	9/21/2015	0d
7	Official project proposal document	9/15/2015	9/23/2015	7d
8	**Design**	**9/24/2015**	**11/2/2015**	**28d**
9	Create team contract	9/24/2015	10/5/2015	8d
10	Define technology stack	9/24/2015	10/12/2015	13d
11	**Setup development environment**	**10/13/2015**	**10/23/2015**	**9d**
12	Set up repository	10/13/2015	10/14/2015	2d
13	Install plugins and libraries	10/15/2015	10/16/2015	2d
14	Install software/IDEs	10/19/2015	10/19/2015	0d
15	Define software and DB architechture	10/19/2015	10/23/2015	5d
16	**UX/UI**	**10/5/2015**	**11/2/2015**	**21d**
17	Create user profiles	10/5/2015	10/12/2015	6d
18	Create wireframes	10/13/2015	10/16/2015	4d
19	Create use case diagrams	10/19/2015	10/26/2015	6d
20	Color palette	10/26/2015	11/2/2015	6d
21	**Development and Testing**	**11/3/2015**	**3/21/2016**	**100d**
22	Set up database architecture	11/3/2015	11/10/2015	6d
23	Develop meteor prototype	11/11/2015	12/7/2015	19d
24	Push prototype to full implementation	12/8/2015	3/15/2016	71d
25	Quality Assurance	3/16/2016	3/21/2016	4d
26	Technical Documentation	3/22/2016	4/8/2016	14d
27	**Create technical documentation**	**4/1/2016**	**4/11/2016**	**6d**
28	Research ownership	4/1/2016	4/1/2016	1d
29	User training	4/1/2016	4/6/2016	4d
30	Documentation refinement	4/7/2016	4/8/2016	2d
31	Documentation publishing	4/11/2016	4/11/2016	0d
32	**Demonstration and Finalization**	**4/11/2016**	**5/2/2016**	**15d**
33	**Preparation for IT Expo**	**4/11/2016**	**4/11/2016**	**1d**
34	Obtain hardware	4/11/2016	4/11/2016	1d
35	Prepare visual aids	4/11/2016	4/11/2016	1d
36	Prepare physical documentation	4/11/2016	4/11/2016	1d
37	Demonstrate at IT Expo	4/12/2016	4/12/2016	0d
38	Conduct Beta testing	4/13/2016	4/29/2016	13d
39	Deploy application to market	5/2/2016	5/2/2016	0d

Figure 3: Gantt chart

Technical Architecture

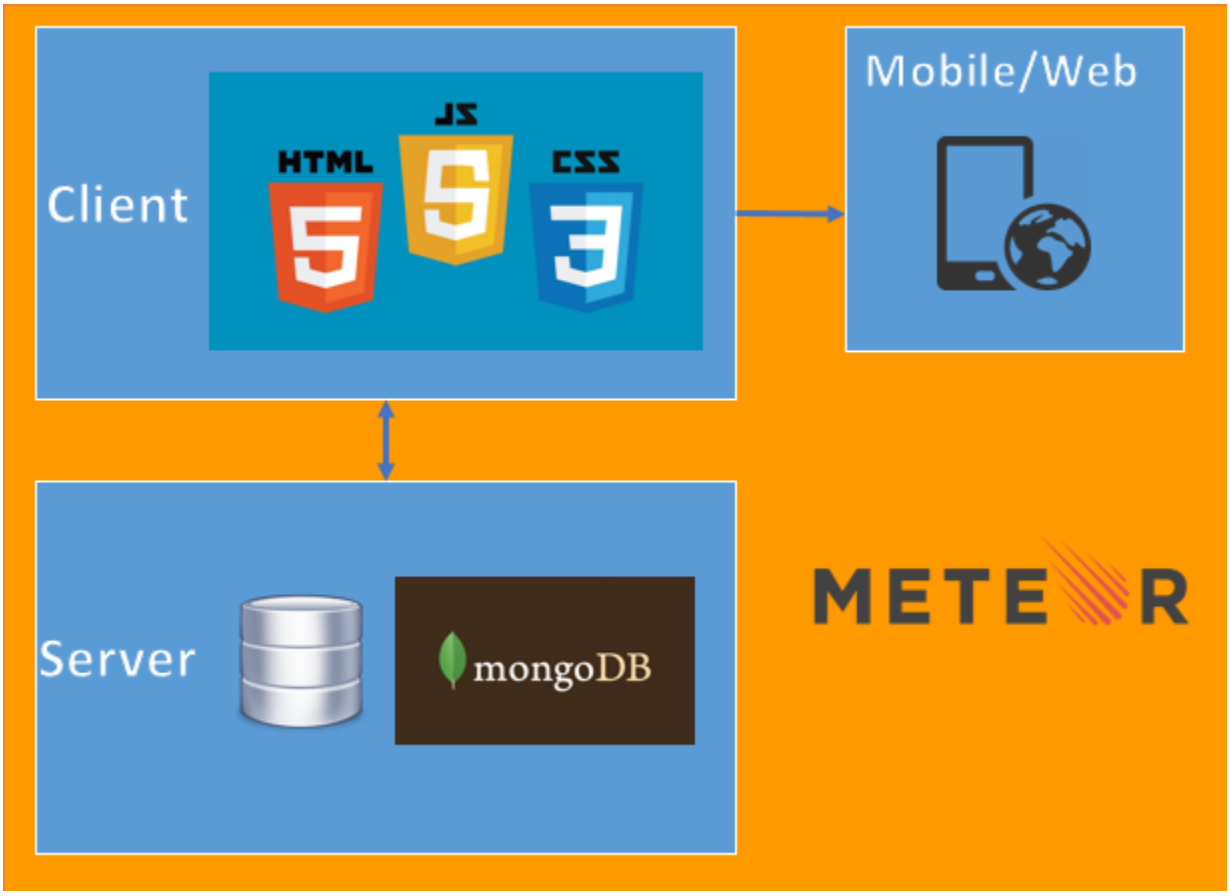


Figure 4: Technical Architecture

Proposed Budget

Our budget currently consists of finding software, solutions, and more that are free of costs to the general public and through The University of Cincinnati. We will be able to use virtual machine through the free tier of MongoLab to host our application code and databases. Initially, the budget for development of this application will come at no cost. This will have to be adjusted in the future when a permanent hosting solution is decided on, and the application begins migration into a live environment

Testing

The following highlights all aspects of testing around GoWhere.

Overview

The following material will explain our process of testing GoWhere. This will apply to all platforms supported by GoWhere (Android, iOS, and web). This should be used as a reference and can be utilized by the following individuals and/or groups:

- Developers/Administrators
- Project Managers
- Team Members
- User Acceptance Testing Personnel

Scope

The scope of testing involves testing the GoWhere application throughout all supported platforms including Android, iOS, and the web. The test will be organized and conducted based off of the requirements of the application.

Objective

The purpose of testing is to ensure that all developed functionality performs as intended. These tests are also designed to detect issues with user interaction in an effort to maximize user experience. This will also serve as an opportunity to find any unknown bugs.

Entry and Exit Criteria

Entry Criteria:

- Application is deployed and running
- Test environment is setup
- Users are ready to perform tests

Exit Criteria:

- All tests have been completed
- Users have completed instructions and marked comments and issues
- Bugs/Errors are documented and fixed

Logging and Reporting

If developers detect a bug that must be addressed, it should be added to an issue log and marked with level of severity to be fixed. Issues will be resolved accordingly. The users conducting acceptance testing will record any issues while completing tasks. They will then submit their documents to the developers afterwards and consult further on any potential issues.

System Testing

GoWhere will be tested as the entire application in a whole. The user acceptance testing will explore all intended features and functionality that the application provides to its

users. Testing the application as a whole will simulate usage of a real world user for best results.

Testing Procedures

The following steps are required in preparation for testing:

- Create all of our test scenarios and cases
- Create step-by-step documents for users to perform testing
- Create feedback forms for users to report issues
- Find users to conduct testing

Below are the tests to be performed:

- Developer testing: This will consist of the developers testing functionality of the application in attempt to break it. It will also serve to detect logic errors in user input and additional backend portions of the application.
- User Acceptance Testing: Users will walk through step-by-step documents to perform tasks simulating real world users. This will not only detect issues while performing normal tasks but also serve to maximize user experience.
- Stability Test: This test will serve to ensure that GoWhere is stable and achieve ideal performance across all platforms.

Pass/Fail Conditions

All different types of testing must be passed in all categories before being released to market. If any issues exists, they must be logged, documented, and resolved before re-testing. The re-test is necessary and will repeat until all criteria is met.

Schedule of Testing

Testing may begin early to test functionality of completed functionality in order to compensate for the short time frame of testing. This will help to resolve any issues that come up and also to prevent non-completion of the project.

Group	Dates	Frequency
Developers	3/15/2016 – 3/21-2016	Daily
Users	3/15/2016 – 3/21-2016	Daily

Figure 5: Testing Schedule

Risks

The following are potential risks involving testing:

- Android, iOS, and web device availabilities for testing
- User availability for testing
- Adequate time period for testing
- Delay due to bug fixes

Conclusion

Planning events with friends, family, colleagues, and peers does not need to be such a stressful process. Most relationships nowadays are maintained through social media and texting. The world could use more physical interaction through events and meetups. GoWhere will break through this obstacle and take the rough aspects out of event planning so that users can focus solely on having a good time with each other.

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