Computer Science and Engineering, University of Nevada Reno

Party Up

Assignment 1:

Design Update, Project Management, and Schedule
2/15/17

Group Members:

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Abstract

Our project, “Party Up,” aims to make it easier for people to host events, notify their friends, and interact with their friends’ events. By using Google’s API for GPS and Maps, information and directions for people to meet are more available and visual. It’s important that specifications for social gatherings are managed accurately and clearly to prevent conflicts (location, date, time) and make sure as much people can attend. The web service/API and database of the Android application aims to facilitate successful social gatherings by making sure people know directions/visuals of locations and who/how much people plan on attending to prepare.

The main goal of PartyUp is to submerge users into a live experience by allowing live events to be shared among users. PartyUp hopes to facilitate event planning between friends by reducing hassle when inviting friends. Although similar services do exist, such as facebook event planning, there currently is not a service with a user interface specifically designed for live event planning. With the use of Google Maps users are able to visually manage events and plan according to the corresponding location. The use of maps is more appealing to the average user and eliminates the use of list reading. Our app makes it easier for you to find nearby events and parties by having pins placed on a map notifying you the location, the person that is hosting, and the people that are going. So if you’re ever bored, all you have to do is use the app, look at the map, and see what people nearby are doing. Or, set up your own event, and start your own party!

Updates and Changes

Our project was recently switched to “Party Up” at the beginning of the semester. Currently, we are trying to reorganize our priorities, specifications, and requirements for this new project. We are also switching to Visual Studio, Xamarin, SQL, C#, and the Restful API to finish our project. The team will be mentored by IS professor, Dr. Michael Ekedahl. The team has chosen him as their mentor due to his experience with app development and also because the team is on a rush due to the limited timeframe to finish the project.

Our current design is to have the app be deployed to Android. An IOS version isn’t feasible due to time constraints. Our current specifications are to use Google’s API to use GPS and Maps to show nearby events. Our base functionality is to have a user being able to host an event where they are located at, and to also invite and notify other users of the event. Other users, can see the location of the event in the map, see who’s hosting, and who’s going. Other functionalities that will be added if time permits is to set privacy, and compatibility with other social media platforms such as Facebook or Twitter.

Major developments so far are choosing our new developer environment, the languages and API that will be used, and a new mentor/external advisor. Dr. Ekedahl has been approved by Dr. Folmer to be our new external advisor to oversee our project. The team will work with Dr. Ekedahl to ensure that we will at least have an app with the baseline features finished by the end of the semester. The

team has also set a strict calendar for us to follow to ensure we are not behind. Dr. Ekedahl is also aware of upcoming deadlines, and has and will set more deadlines for the team to follow. Dr. Ekedahl will communicate with the CSE department and CS 426 professors, if need be, to ensure the standards of the project is up to par with the expected standards of the CSE department.

Project Deliverables

Web Service/ API - This component focuses on the communication between the application and the database. All request to pull and push data will utilize this web service. Consuming the RESTful web service by the application is implemented through Xamarin. The web service will host the routing of requests from Xamarin to the database. HTTP protocol is used to route requests from client to server in form of URL. Responses from the server are made through either XML or JSON format. Henry Huffman will be the team member who manages this component of the project.

1. As a new user to PartyUp, I want to create and update a personalized profile.
    a. New account is created through sign up using email and password. New credentials need to be routed to database and new account is initialized using the user's given credentials.
    b. Web service should handle multiple requests at the same time and route to database.
2. As a user of PartyUp, I want to have lists of events for my friends to see.
    a. Android will communicate with web service to send event data to database.
3. As a user of PartyUp, I would like to view all details of my friends' events.
    a. Specific information from friend lists can be pulled from database and sent to application.
    b. XML or JSON data needs to be translated.
4. As a user of PartyUp, I need to be able to message friends regarding hosted events.
    a. Broadcast, receiver will handle messages from user to user.
5. As a user of PartyUp, I want the ability to modify my friends list.
    a. Modification are again routed to database with corresponding URL and modification requests to update database.

Database - This component will hold all of the data vital to application operations such as user profile data and event information.
Martin Revilla will be the team member responsible for managing this component of the project.

1. As a user of PartyUp, I will modify events that have been created.
    a. Event lists will be linked to each user and modifications need to be processed by database to edits lists.
2. As a user of PartyUp, I want my friends list updated by adds/removes and saved.
    a. Database will hold each user's profile and have lists associating friends.

3. As a user of PartyUp, I want to be able to have friends assigned to specific groups.
    a. References to groups need to be made from each profile that is in group.
    b. Each user can modify existing members.
4. As a user of PartyUp, I want the specifications of the events that I create and edit saved.
    a. Database modification of events should be set to only be handled by host of event.
5. As a user of PartyUp, I want my personalized profile updated by edits and saved.
    a. Changes to profile are saved to database backend and managed through web service.

Android Application - This component is the android application that users will install on their own devices and use to interface with the all other components. User interface will launch with Google Maps displaying posts corresponding to events set by friends. Interface will have emphasis on maps and visual representation of event lists using maps. Events will only display at a certain radius from current location unless invited specifically to event through groups.
Jaime Moreno and Brian Parawan will be responsible for co-managing this component of the project.

1. As a user of PartyUp, I want to post current events to map allowing friends to automatically see my post.
    a. Google API will handle UI display of events.
    b. Visual representation of events will be displayed by pins inside of Google Maps.
2. As a user of PartyUp, I want the ability to filter events according to groups, public, or anonymous.
    a. Event locations must only display to associated friends.
    b. Filtering should change the events displayed corresponding to the filter.
3. As a user of PartyUp, I want the ability to see upcoming events list for the day.
    a. List will display events of the day depending on the filter selected.
4. As a user of PartyUp, I want to see all messages received from friends.
    a. Messages page will show history of messages with corresponding senders.
    b. Messages can be composed and sent to friends.
5. As a user of PartyUp, I want to receive notifications of events posted by friends.
    a. Broadcast and listeners will handle notification of events to friends list.
    b. Broadcast signal is sent to all friends and listener will sense notification and display.
6. As a user of PartyUp, I want the ability to post pictures, videos, and text on event pages.
    a. Application will need access to camera and will need to send data to appropriate event page.
    b. Permissions for phone resources will be requested from user.
7. As a user of PartyUp, I want the ability to see who (from friends list) is located at event.
    a. Check in to locations will flag user's profile to indicate participation of event.
    b. Users attending event will be shown in events information pop-up page.

Assignment and Schedule

Responsibilities will be assigned in this basic format:

Every subsystem/component of this project will have a manager to oversee and verify the completion of each task.

Each component will then be implemented using the paired-programming technique to ensure progress and reliability of development.

Below are links to the schedule and scrum board the team will use to complete the project before the deadline. Please note that the schedule shows completion of all tasks well before the final deadline; however, this is designed to give the team extra time to account for unforeseen delays. All remaining time will be utilized to add more functionality beyond the agreed upon baseline functionality.

High Level Calendar Link (Overview of general operations):

https://docs.google.com/a/people.unr.edu/spreadsheets/d/15flGfiyrlq9Ne9Y_vehAqbuHdC5Z3wW-f4b0Rw7woPs/edit?usp=sharing

Specific Tasks Calender Link (Tasks from previous section):
https://docs.google.com/spreadsheets/d/1DVEM6ieaobx3SRA1yk-cN6h5MBMHwZd6m-ZdY7AO1fw/edit?usp=sharing

Scrum Board Link (Scrum board for tasks from previous section):

http://scrumy.com/PartyUP

In the event that the project cannot be fully completed, an app with the baseline functionality will be completed:

1) A user able to host events in his/her location will be completed as well as the feature of having other users seeing this same event posted in the map.
2) An alternate view in which instead of the map showing events, it will just be a list of events that will detail who's hosting and the address of the events.
3) Posted events will be seen by other users

What will not be completed are extra features:

1) Private events in which only invited users can see the existence and location of the party.
2) The app being compatible with other social media platforms such as Facebook or Twitter.
3) Media stream of pictures, video, snapchats, etc.
4) Group messaging

The team will use Github for version control. The team will also download the Github Extension for Visual Studio since that will be our IDE for the project. The team will push their code to Git and if it's mutually accepted by our team members that code satisfies a requirement for the project, it will be merged. The actual repository for the project hasn't been made yet as of this writing.

The following are our Github accounts:

Team account:

https://github.com/PartyUPTeam

Henry Huffman:

https://github.com/Hwnry

Martin Revilla:
https://github.com/mrevilla

Jaime Moreno:
https://github.com/jaimemoreno

Brian Parawan:
https://github.com/brianparawan289

Project Monitoring and Risk

The team will follow the calendar that sets our own deadlines to complete the project before April. Different tasks are to be completed in different dates, and while the calendar is ambitious, it is done on purpose to make sure we are on time and if something goes wrong, there is extra time for us to adjust. Our mentor, Dr. Ekedahl will also oversee the project to make sure it is completed. He will guide us, point us to resources we could use, and also put deadlines on the team throughout the semester. Moreover, the team will actively monitor and manage tasks through using the online scrum board (http://scrumy.com/PartyUP**).**

1) The project won't be completed in the next few weeks
    a) Our team has developed an ambitious/strict schedule that sets our sights to complete our project well before the due date. This schedule will put the pressure on our team to work hard to achieve goals and meet deadlines, while giving us leeway to overcome unforeseen delays and difficulties.
    b) Our mentor, Dr. Ekedahl will also oversee the project and our progress throughout the semester. Dr. Ekedahl will set milestones that will need to be met on specific timeframes.
2) Not all features would be implemented.
    a) Due to the project being started a few weeks ago, not all features being present by the end of the semester is expected. Our plan is to at least give the base functionality of the app.
    b) The team would need to consult with Dr. Ekedahl if the team is stuck to make sure progress is still being made.
3) Our mentor/external advisor would have different requirements and different expectations compared to the CS Department's as well as the CS426 class.
    a) We have given Dr. Ekedahl contact details of our CS 426 professors. He himself has stated that he wants to be involved and cooperative with what the CS Department expects from the project. We also will provide his contact details within this document to ensure if our CS 426 instructors have any questions towards Dr. Ekedahl.

4) The team won't learn the skills necessary to build the app in the given time.

a) Dr. Ekedahl has plenty of experience with app development, and he is also knowledgeable of the different tools and online resources to progress through the project.
b) Our team has signed up for a few Udemy courses concerning ASP.net and the Restful API to learn about the tools we need.
c) Work loads and different components of the project will be divided among team members.

5) Keeping up with the schedule the team has set for itself.
    a) Besides our schedule, Dr. Ekedahl will set milestones that need to be completed for the rest of the semester. As a result, our team also needs to catch up with our mentor's deadlines.
    b) Besides Dr. Ekedahl, CS426 also has deadlines in which the team needs to meet and promise deliverables.
6) Corrupt development environment
    a) All work will be pushed to Github. Doing so will create a central repository and prevent our team from losing all source code.
    b) Restoration points of developing machines and checkpoints of virtual machines will be used to preserve development environments and base functionality of dedicated machines.
7) Miscommunication between the team and our mentor.
    a) The team will meet with Dr. Ekedahl on a weekly basis to discuss progress and any issues that will come up.
    b) The team will also notify the deadlines for CS426 to Dr. Ekedahl so he's aware of the semester's timeline.
8) Miscommunication between team members concerning the requirements and implementation of the project.
    a) The team will regularly communicate to ensure everyone is aware of the state of the project.
    b) CS426's assignments will also encourage collaboration as they are also designed for teamwork and communication concerning the project.
9) The resources we are currently using such as ASP.Net and Restful API won't be sufficient to complete the project.
    a) The team will regularly communicate with our mentor to ensure proposed tools and resources will be sufficient and appropriate to complete the project.
    b) Staying on the schedule the team has set will also give us extra time to adjust and switch to another toolset if necessary.
10) Unequal distribution of work to finish the project.
    a) DIfferent components of the project will be divided evenly between team members.
    b) Github can also monitor who contributes the most the project.
    c) A team contract will also be created to mitigate team members being late to meetings and/or to ensure they contribute the project.

Contribution of team members

Martin Revilla - Monitoring and Risk, Assignment and Schedule, Updates and Changes

Jaime Moreno - Project Deliverables

Brian Parawan - Abstract, Project Deliverables

Henry Huffman - Project Deliverables, Assignment and Schedule, Updates and Changes