Purdue University

Sprint Planning Document

WiFinder Application

Team #14:

Rayten Arnold Rex, Cole Baughn, Vishal Gill, Zeyu Pan, Andrew Sytsma, Michael Young

**1. Sprint Overview**

For our first sprint, we will learn iOS development in swift and Android development in Java. The next step would be to play around with the P2P classes and test basic functionality of communicating with another phone. The three main goals of this sprint are:

1. Learn mobile development by watching tutorials and building basic apps.
2. Implement basic P2P functionality between phones.
3. Implement necessary user interfaces for iPhones and Androids.

**Scrum Master:** Rayten Rex

**Scrum Meetings/Time:** MWF at 12:30 pm

**Risks/Challenges:** Learning mobile development at a reasonable enough pace to implement basic features of the app. Successfully wrap C++ backend code with Swift and Java. Making sure git commands are understood by all team members and executed successfully.

**2. Current Sprint Detail**

**User Story:** As a user, I want to be able to communicate between two iPhone devices via the multipeer connectivity framework (MCF).

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| --- | --- | --- |
| Task Description | Estimated Time | Owner |
| Research iOS development and watch and learn from tutorials on how to create basic apps and learn necessary built in functions like the MCF. | 25 | Vishal |
| Research iOS development and watch and learn from tutorials on how to create basic apps and learn necessary built in functions like the MCF. | 25 | Zeyu |

**Acceptance Criteria:** If this user story is implemented successfully, a tester should be able to communicate with another iPhone device within the wifi range using this application.

**User Story:** As a user, I want basic GUI functionality inside the app that will allow the user to choose chatrooms and change setting.

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| --- | --- | --- |
| Task Description | Estimated Time | Owner |
| Implement a GUI that will allow the user to choose between chat rooms | 4 | Vishal |
| Implement a GUI that will allow the user to adjust settings in the app such as colors, fonts and themes. | 6 | Zeyu |

**Acceptance Criteria:** If this user story is successfully implemented the user should be able to choose a chatroom and change the app settings.

**User Story:** As a user, I want a UI on Android Devices that is pretty and customizable, and will allow me to easily select and communicate with chat rooms. Also I want to be able to view my past conversations somewhere.

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| --- | --- | --- |
| Task Description | Estimated Time | Owner |
| Learn the tools in Android Studio | 15 | Cole |
| Design the UI forms | 5 | Cole |
| Add events to UI form controls to link UI forms | 5 | Cole |
| Add basic settings changing | 5 | Cole |

**Acceptance Criteria:** If this user story is implemented successfully, a tester should be able to navigate around the UI and make basic settings changes.

**User Story:** As a user, I want to be able to send and receive messages with other devices.

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| --- | --- | --- |
| Task Description | Estimated Time | Owner |
| Learn the tools in Android Studio | 15 | Michael |
| Connect two Android devices using WifiP2PManager. | 3 | Michael |
| Test the connection of Android devices under different conditions such as distance and interference. | 5 | Michael |
| Find a simple and efficient way to detect whether messages have been sent already and drop the message if it has. | 4 | Michael |
| Investigate communication between both iOS and Android devices using P2P methodology. | 3 | Michael |
| Implement ChatRoomManager. | 15 | Rayten |
| Wrap ChatRoomManager for iOS and Android | 15 | Rayten |
| Implement ChatRoom and Message | 15 | Andrew |
| Wrap ChatRoom and Message for iOS and Android | 15 | Andrew |

**Acceptance Criteria:** If this user story is successfully implemented, the user will be able to successfully communicate using only the wireless radio of his or her device with one or more nearby devices. Messages that have already been received from the network will be dropped properly.

**3. Remaining Backlog**

**Functional:**

1. As a user, I want to access the local area chat room because I want to talk to people around me.
2. As a user, I want the ability to create and/or join a private chatroom because I want to chat with a specific group of people without others being able to join.
3. As a user, I want to remain anonymous because I don’t want people to know who I am while chatting.
4. As a user, I literally need emoticons because I want to express emotions in a picture format.
5. As a user, I want to be able to change my “in app name” across sessions because it will allow me to remain anonymous.
6. As a user, I want to be able to able to save my “in app name” across sessions because I do not want to have to type in my name everytime I use the app.
7. As a user, I want to be able to view my past conversation(s) because I would like to be able to access information that I may have forgotten.
8. As a user, I want to be able to view private chat rooms because I want to know what private chat rooms are available to me.
9. As a user, I want some kind of filter to minimize spam because I do not want to have my chat experience ruined by other users.
10. As a user, I want the ability to block the messages of other users because I do not want my chat experience ruined by other users.
11. As a developer, I want to be able to receive feedback from users because I can use the feedback to better the app.
12. As a developer, I want to be able to log errors because I can use the error logs to figure out why the application failed to work.
13. As a developer, I want a secure method to transfer data because I do not want my users’ personal information to be accessed by a third party.
14. As a user, I want to be able to send a picture because I want allow other people to see them.
15. As a user, I don’t want pictures to clog up my chat because I do not want my chat experience to be cluttered by large images.
16. As a user, I would like to be able to enable and disable timestamps because I would like to know when a message is received but also have the option to disable it.
17. As a user, I would like to change timestamps between military and standard time because I want to see the time in different formats to customize my chat experience.

**Non-Functional:**

1. As a user, I want to send and receive messages quickly or in about under a second.
2. As a user, I want cross-platform communication because I want to be able to chat with users that have a different phone than me.(if time allows)
3. As a user, I want the application to run with as little RAM usage as possible.
4. As a developer, I want to transfer the background code easily between Android and iOS because I do not want to have to rewrite more code than necessary.
5. As a developer, I want easy updates because I do not want it to be difficult to push updates to the user.
6. As a user, I do not want my data or internet used for this app because this app is supposed to be able to be used without the Internet.
7. As a user, I want to be able to use this app without excessive battery strain because I want the app to run a long time without my battery running out.
8. As a user, I want to be able to use the app on Android phones.
9. As a user, I want to be able to use the app on iOS phones.
10. As a user, I want my data to be secure in private chat rooms because I do not want a third party accessing my messages or information.
11. As a user, I want to be able to use this app on Windows phones.