Purdue University

Sprint Planning Document

WiFinder Application

Team #14:

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**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 use the app on Android phones because I want to use it on my Android phone.

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| Task Description | Estimated Time | Owner |
| Learn the tools in Android Studio | 15 | Michael |
| Learn the tools in Android Studio | 8 | Cole |

**Acceptance Criteria:**  If this user story is implemented successfully, this app will run on an Android phone.

**User Story:** As a user, I want to be able to use the app on iOS phones because I want to use it on my iOS phone.

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| Task Description | Estimated Time | Owner |
| Research iOS development and watch and learn from tutorials on how to create basic apps. | 20 | Vishal |
| Research iOS development and watch and learn from tutorials on how to create basic apps. | 20 | Zeyu |
| Implement a basic app in Swift to test communication between two iPhone devices using the multipeer connectivity framework. | 5/5 | Vishal, Zeyu |

**Acceptance Criteria:** If this user story is implemented successfully, this app will run on an iOS phone.

**User Story:** As a user, I want to be able to view messages sent to me because it will allow me to take part in the conversation.

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| Task Description | Estimated Time | Owner |
| Create a Display for the Chat View with received messages displayed. (Android) | 4 | Cole |
| Create a Display for the Chat View with received messages displayed. (iOS) | 2/2 | Vishal, Zeyu |

**Acceptance Criteria:** If this user story is implemented successfully, the user will be able to view the messages that they receive on their phone.

**User Story:** As a user, I want to be able to see messages that I have sent because it will allow me to better keep track of the on-going conversation.

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| Task Description | Estimated Time | Owner |
| Print Sent messages in the Chat View Display. (Android) | 4 | Cole |
| Print Sent messages in the Chat View Display. (iOS) | 2/2 | Vishal, Zeyu |

**Acceptance Criteria:** If this user story is implemented successfully, the user will be able to view the messages that they send from their phone.

**User Story:** As a user, I literally need emoticons because I want to express emotions in a picture format.

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| Task Description | Estimated Time | Owner |
| Design the emoticons to be used | 4 hours | Cole |
| Have emoticons replace strings. (Android) | 6 hours | Cole |

**Acceptance Criteria:** If this user story is implemented successfully, there will be images that will be assigned to replace certain strings in the Chat View.

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

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| Test the connection of iPhone devices under different conditions such as distance and interference. | 2/2 | Vishal, Zeyu |

**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 ignored.

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

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| Task Description | Estimated Time | Owner |
| Connect two Android devices using WifiP2PManager in Android. | 5 | Michael |
| Test the connection of Android devices under different conditions such as distance and interference. | 3 | Michael |
| Find a simple and efficient way to detect whether messages have been received already and ignore them if they have been received. | 4 | Michael |
| Investigate communication between both iOS and Android devices using P2P methodology. | 3 | Michael |
| In the GUI have a box to insert text into and a button to press. This will be used to create and send a message. | 4 | Cole |

**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 ignored.

**User Story:**As a developer, I want to use background code to connect the GUI and the network without rewriting code because rewriting code is a bad practice and takes more time, and the network and the GUI should not have to interact.

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| Task Description | Estimated Time | Owner |
| Learn Wrapping in Swift | 7 | Andrew |
| Learn Wrapping in Swift | 7 | Rayten |
| Learn Wrapping in Java | 6 | Andrew |
| Learn Wrapping in Java | 5 | Rayten |
| Implement Wrapping in Swift | 4 | Andrew |
| Implement Wrapping in Swift | 5 | Rayten |
| Implement Wrapping in Java | 3 | Andrew |
| Implement Wrapping in Java | 3 | Rayten |
| Implement a ChatRoom Class | 5 | Andrew |
| Implement a Message Class | 5 | Andrew |
| Implement a ChatRoomManager Class | 10 | Rayten |

**Acceptance Criteria:** If this user story is successfully implemented, the background will be coded to allow for connection between the GUI and networking of both Android and iOS devices without coding in more than one language.

**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 want to be able to change the color setting of the GUI because I want to customize my app experience.
5. As a user, I want to be able to change the font setting of the GUI because I want to customize my app experience.
6. As a user, I want to be able to change the theme of the GUI because I want to customize my app experience.
7. As a user, I want to be able to change the style setting of the GUI because I want to customize my app experience.
8. As a user, I want to be able to change my “in app name” across sessions because it will allow me to remain anonymous.
9. 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.
10. 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.
11. As a user, I want to be able to view chat rooms because I want to know what chat rooms are available to me.
12. As a user, I want to be able to join chat rooms because I want to be able to chat with other users.
13. 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.
14. 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.
15. 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.
16. As a developer, I want to be able to receive feedback from users because I can use the feedback to better the app.
17. 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.
18. 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.
19. As a user, I want to be able to send a picture because I want allow other people to see them.
20. 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.
21. 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.
22. 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.

**Nonfunctional:**

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 easy updates because I do not want it to be difficult to push updates to the user.
5. 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.
6. 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.
7. 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.