

Blueatt

Team 35 - Sprint 3 Overview

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Sprint Overview

For sprint 3 our main goal is to make the Bluetooth scanning function work and the database to work for the app and link everything and finish the product.

Scrum Master: Justin Boudreau

Meeting plan: Sundays, 6-9pm

Tuesdays, Thursdays: 6:30-9pm

Risks and challenges

In sprint 3 our main challenges are getting the bluetooth implementation to work as planned in order for the app to work correctly and also getting the database to be able to communicate properly with the app. We also need to ensure that each user story step is connected completely with front and back end.

Current Sprint Detail

User Story #1

As a student, I would like to have my attendance taken just by bringing bluetooth device

#	Description	Time	Owner
1	Implement bluetooth scanning method	5	Shulin
2	Compare scanned devices with roster's device IDs	4	Shulin
3	Add attendance record for that date to the database	3	Justin

Testing: use test data to make sure the functions have expected outputs.

Acceptance Criteria:

1. Given a student brings a device within range of the scanner, the device will be recorded
2. Given a student doesn't have a device within range, the attendance will not be taken
3. Given a student's attendance, the database accurately records the information

User Story #2

As a student, I would like to receive a notification that my attendance has been recorded

#	Description	Time	Owner
1	When attendance recording ends, the system should check if the attendance has been recorded successfully or not.	3	Michael
2	The system should send the result whether the attendance has been recorded	4	Michael
3	Create UI for a student to receive a notification whether the attendance has been recorded.	5	Moon sun

Testing: use test data to make sure the functions have expected outputs.

Acceptance Criteria:

1. Given that the attendance recording ended, the system should check whether the attendance has been recorded successfully.
2. Given the condition that the attendance recording occurred without error, the system should indicate that the attendance has been recorded.

Given that the attendance has been recorded well, UI should notify a student that the attendance has been successfully recorded.

User Story #3

As an instructor, I would like to view the tendency of a students' attendance during the semester graphically

#	Description	Time	Owner
1	Create UI to select class and get attendance report	6	Justin
2	Create query to pull information from the database	2	Justin
3	Use database information to create semester attendance stats	3	Moon
4	Create UI to display students' attendance throughout the semester	5	Michael

Time for Unit Testing: 2 hour

Acceptance Criteria:

1. Given the instructor requests information from the database it is correct
2. Given the attendance for the semester the statistics are created properly
3. Given the attendance statistics they are displayed well in the UI

User Story #4

As an instructor, Be able to handle up to a 400 person lecture hall (Non-Functional)

#	Description	Time	Owner
1	Code backend to handle up to 400 devices	2	Michael
2	Create database to hold up to 400 attendance records and students	5	Justin
3	Create 400 units of test data	1	Michael

Time for Unit Testing: 2 hour

Acceptance Criteria:

1. Given there are less than 400 students, the app does not crash
2. Given there are less than 400 students, we can accurately pull data from the database
3. Given there are less than 400 students, the database store information properly

User Story #5

As an instructor, I would like to get a reading of a student's attendance on a specific date

#	Description	Time	Owner
1	Allow selection of a course and create database query to pull roster	3	Michael
2	Create UI to select student's Purdue username to check attendance	5	Michael
3	Create query to pull attendance from specific date in a certain class in the database	2	Justin
4	Have information displayed in the UI	2	Michael

Time for Unit Testing: 2 hour

Acceptance Criteria:

1. Given the input of a course wanted, search in the database and see if the result is correct.
2. Given the the student's username, see if the program outputs the correct attendance record.
3. Given the date, check if the output of the attendance of the class is correct.
4. Given the functionally correct output, check if the user interface displays it correctly

User Story #6

As an instructor, I would like to store student's information in the software

#	Description	Time	Owner
1	Convert roster input to database accepted query	7	Justin
2	Insert student information from roster to database	3	Justin
3	Create UI to selected input file	3	Michael

Time for Unit Testing: 2 hour

Acceptance Criteria:

1. Given the roster input, the database would output to a file that fits the requirements of the database.
2. Given the generated query, use the database to read and check if the result is right.
3. Given the correct functionality tested by the first steps, build the user interface and use it to test again the previous functionalities and ensure that it's working.

User Story #7

As a student, I would like to see which device I have registered

#	Description	Time	Owner
1	Create UI to view registered devices	4	Moon
2	Pull students' registered device IDs	3	Justin
3	Displayed device IDs	2	Michael

Time for Unit Testing: 2 hour

Acceptance Criteria:

1. Given a student has a registered device, the ID displayed is correct
2. Given a student wants to see their registered device, it is displayed
3. Given a device ID is updated, the correct ID is displayed

User Story #8

As an instructor, I would like the attendance to be scanned and recorded in 5 minutes (Non-functional)

#	Description	Time	Owner
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1	Scan all devices in the area	4	Shulin
2	Compare devices with course roster	3	Michael
3	Save attendance to the database	3	Justin

Time for Unit Testing: 2 hour

Acceptance Criteria:

1. Given there are less than 400 students the app scans within 5 minutes
2. Given there are less than 400 students the app records the attendance
3. Given the scanned devices, the attendance is taken properly

Backlog

- ~~1. As an instructor, I would like to store student's information in the software~~
- ~~2. As an instructor, I would like to get a quick reading of student attendance~~
- ~~3. As an instructor, I would like to select which class is in session~~
- ~~4. As an instructor, I would like to connect the scanner to a computer quickly~~
- ~~5. As an instructor, I would like to select the intervals to periodically check for bluetooth signals~~
- ~~6. As an instructor, I would like to view the percentage of attendance of each lecture~~
- ~~7. As an instructor, I would like to select the way to get the information, such as emails or instant report~~
- ~~8. As an instructor, I would like to view the tendency of a student's attendance during the semester graphically~~
- ~~9. As an instructor, I would like to get notifications on if the scan is successful or not~~
- ~~10. As an instructor, I would like to only receive information on students in the class~~
- ~~11. As an instructor, I would like to manually add/delete/modify student's attendance~~
- ~~12. As an instructor, I would like to be able to add or remove a student from a class~~
- ~~13. As an instructor, I would like to be able to edit student's information if necessary~~
- ~~14. As a student, I would like to use general bluetooth devices to connect to the scanner~~
- ~~15. As a student, I would like to have my attendance taken just by bringing bluetooth device~~
- ~~16. As a student, I would like to register my bluetooth device for my Purdue username via phone app~~
- ~~17. As a student, I would like to register a new device to my same Purdue username if I get a new device~~
- ~~18. As a student, I would like to receive a notification that my attendance has been recorded~~
- ~~19. As a student, I would like to, see my attendance trends and historical data~~
- ~~20. As a developer, I would like to get user feedback~~
- ~~21. As a developer, I would like to store student information securely~~
- ~~22. As an instructor, I would like to be able to handle up to a 400 person lecture hall (Non Functional)~~

- ~~23. As an instructor, Program takes attendance within 5 minutes after starting to scan (Non Functional)~~
- ~~24. As a student, I would like to see which devices I have registered~~