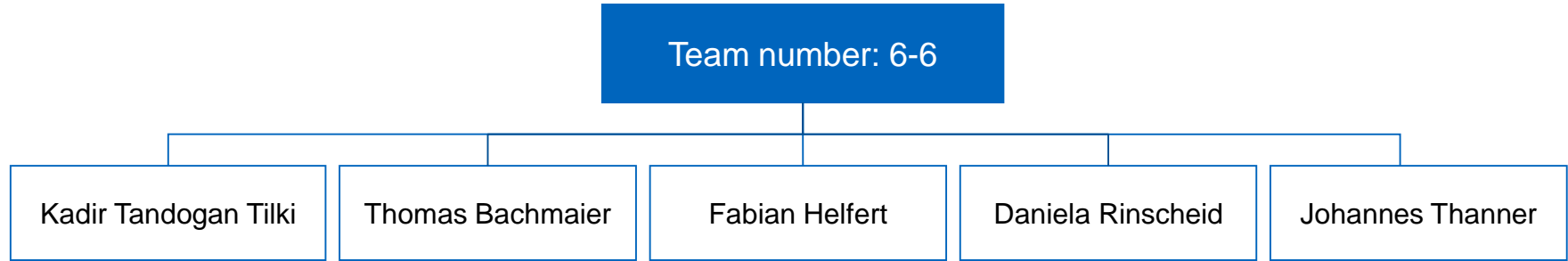


Final presentation of project work

24th of January 2018



Our Team



Project Demo Videos

Whole Project: https://www.dropbox.com/s/jl2ouxzb63lhjzm/proj_demo.mp4?dl=0

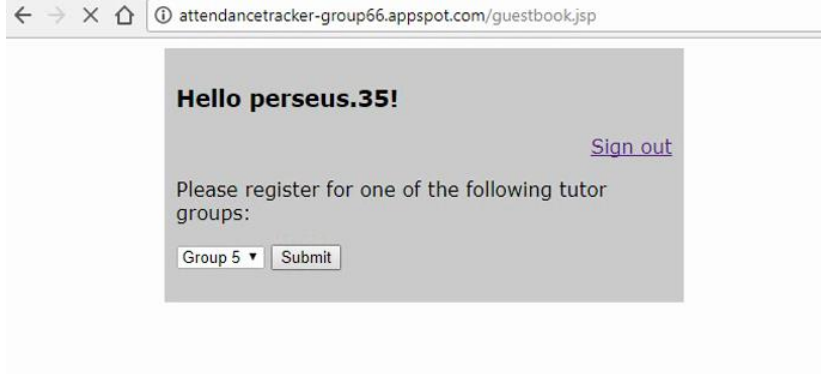
Android: https://www.dropbox.com/s/yvz4hxicxolh8hz/android_demo.mp4?dl=0

Web: https://www.dropbox.com/s/no3nzhvpsuml91b/web_demo.avi?dl=0

Step by step explanation via screenshots on the next slides.

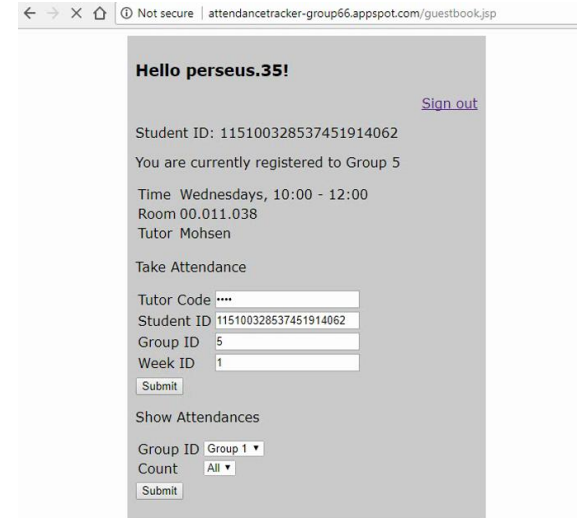
Demo

Register as a new user



A screenshot of a web browser showing the registration page. The address bar displays "attendancetracker-group66.appspot.com/guestbook.jsp". The main content area has a grey background with the text "Hello perseus.35!" and a "Sign out" link. Below this, it says "Please register for one of the following tutor groups:". At the bottom, there is a dropdown menu set to "Group 5" and a "Submit" button.

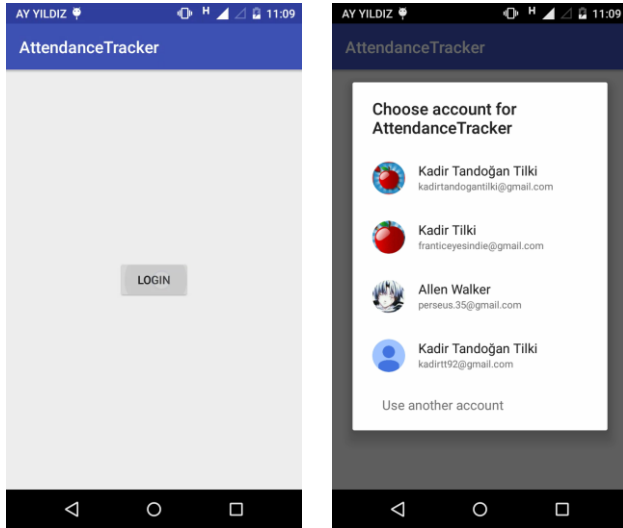
Add attendance manually or use the app (next slide)



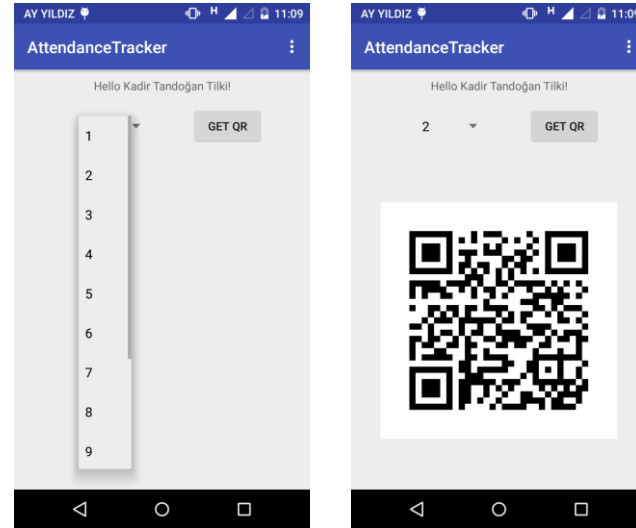
A screenshot of a web browser showing the attendance page. The address bar displays "attendancetracker-group66.appspot.com/guestbook.jsp". The main content area has a grey background with the text "Hello perseus.35!" and a "Sign out" link. Below this, it displays user information: "Student ID: 115100328537451914062", "You are currently registered to Group 5", "Time Wednesdays, 10:00 - 12:00", "Room 00.011.038", and "Tutor Mohsen". There is a "Take Attendance" section with a "Tutor Code" field, a "Student ID" field (containing "115100328537451914062"), a "Group ID" dropdown (set to "5"), a "Week ID" dropdown (set to "1"), and a "Submit" button. Below this is a "Show Attendances" section with a "Group ID" dropdown (set to "Group 1"), a "Count" dropdown (set to "All"), and a "Submit" button.

Demo (continued)

Logging In



Choosing Week and Requesting QR Code



Demo (continued)

Starting PI with Tutor Code (0000)



Scanning QR Code



Attendance is successfully taken

← → ↺ 🏠 ⓘ attendancectracker-group66.appspot.com/attendar

Attendances of Group 5

```
attendance_id: 6256367190933504
student_id: 115100328537451914062
tutorial_group_id: 5
week_id: 3
presented: true
tutorial_info: Time: Wednesdays, 10:00 - 12:00 | Room: 00.011.0
```

```
attendance_id: 6296885912403968
student_id: 115100328537451914062
tutorial_group_id: 5
week_id: 2
presented: true
tutorial_info: Time: Wednesdays, 10:00 - 12:00 | Room: 00.011.0
```

```
attendance_id: 5201690726760448
student_id: 115100328537451914062
tutorial_group_id: 5
week_id: 1
presented: true
tutorial_info: Time: Wednesdays, 10:00 - 12:00 | Room: 00.011.0
```

Completed and Due Features

Week	Task	Status
1	Set up GitHub	Done
2	Web app User login Check if registered Register for tutor group Show group information	Done
3	REST Attendance entry and attendance log Check for correct group Display all attendances per group	Done
4	QR Code on Raspberry Pi Transform attendance string to QR code Read and parse QR code per webcam Display decoded string	Done

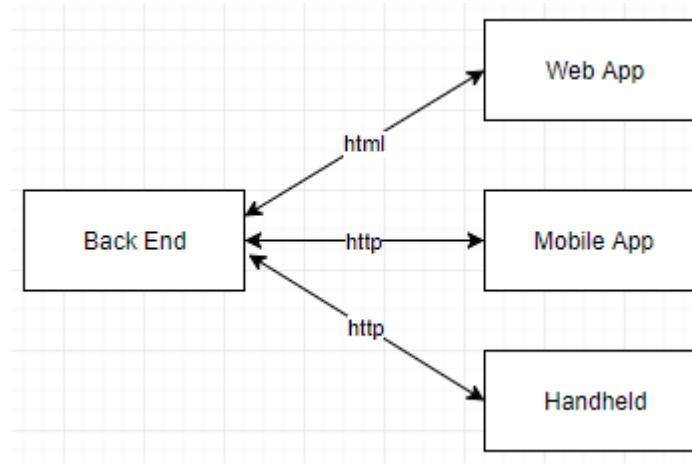
Completed and Due Features

Week	Task	Status
5	Communication between Pi and BE	Done
	Convert attendance record to XML	
	Submit XML via POST request	
	Server should parse and store request in database	
	Show confirmation if success	
6	Attendance tokens	Done
	Extend QR creation upon registration	
	Implement GET request to deliver token per student and week	
	Check for correct token before stored in database otherwise failure message	
	Android app	
	Login functionality	
	Retrieve weekly token and display as QR	
7	Authentication	Done
	Authenticate tutors and students	
	Handheld checks for credentials	

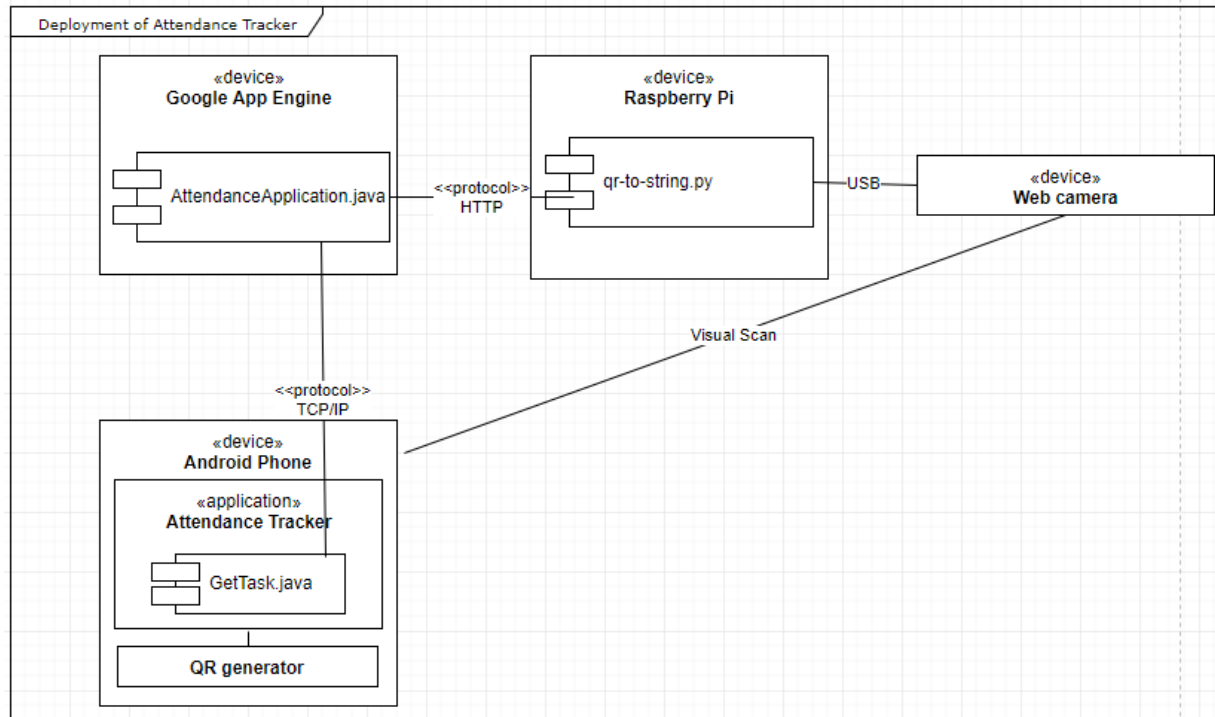
Completed and Due Features

Week	Task	Status
8	No project recommendations given	Done
9	Hashchain based Notary Recording attendance Verfying attendance	Not necessary
10	No project recommendations given	Done

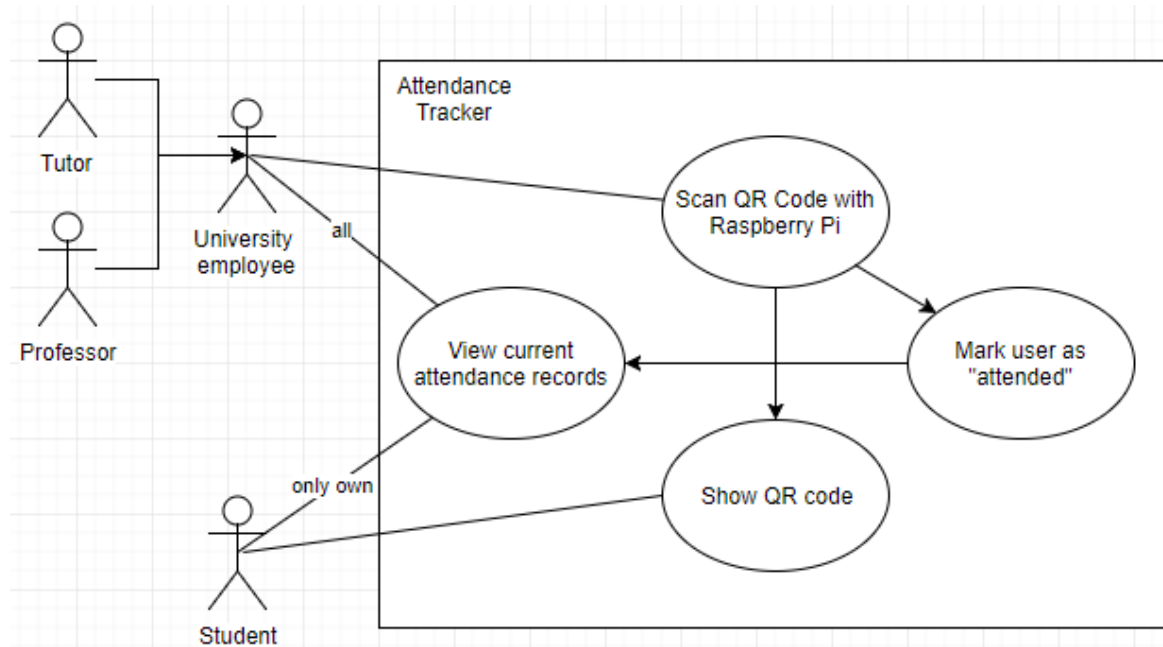
High Level Architecture



Deployment Diagram



Use Case Diagram



Lessons Learned & Tradeoff

Lesson Learned

Better distribution of tasks

Use of github features for shared collaboration

Future Works

We completed all basic features and some optimization on the code was conducted.

The attendance system is ready to use for next years classes...