Attendance System - Mark attendance without a pen and paper

Adrian Sypos

Adrian Golias

Robert Kiliszewski

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Advised by: Kevin O'Brein

Department of Computer Science and Applied Physics
Galway-Mayo Institute of Technology (GMIT)

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About this project

Abstract Attendance System is a mobile / Web application designed for colleges and third level institutes to be used in order to mark attendance of their students. The application allows teachers to be able to mark attendance during class by using their phone. With this application teachers and lecturers across all colleges will be able to monitor their students attendance and generate statistics based on each students attendance in class. We created an Android application and a Web application using a Restful API, M SQL abd the Android application using Java.

Authors Each team member was given a task to do over the development period of the project. Adrian Sypos - https://github.com/sarlianth - Was responsible for the android application as well as certain parts of the Web application

Adrian Golias - https://github.com/snow246 - Was responsible for the development of the Web application.

Robert Kiliszewski - https://github.com/robertkiliszewski - Was responsible for the development of the Web application

Each team member equally contributed towards the read me as well as the dissertation.

Chapter 1

Introduction

During our many years in all kinds of educational institutes we have noticed that the process of manual attendance has been carried out for many, many years with loads of room for improvement. Not only is the process of marking attendance time consuming for both teachers and students but sometimes it may result in the false marking of attendance as well as it distracts the student from paying attention to what is happening in class when they have to write their name in, and keeping track of all the files of all students and all attendance sheets is just troublesome. Today, we don't need to maintain the pen and paper based attendance system, instead we have decided to move it to the technological way of doing daily tasks. Following this thought, we have created an attendance monitoring system based on the concept of web services which is implemented as an Android mobile application that communicates with our web API.

The mobile application would require connecting to the database using Wi-Fi technology. Our project is an efficient, easy to use and user friendly Android mobile application for attendance monitoring. The application will be installed on the user's (in this case teacher's) smart phone. It intends to provide an interface to the teacher who will require minimal details and effort to input into the application to mark attendance of a particular class of students. Apart from that, the application would support strong user authentication, where each teacher will have their own account and quick transmission of data via the web service with minimal delay.

Lecturers will login to the phone application and get connected to the server. After login, they will take attendance using their mobile phone without any trouble.

Make sure you use references [1]

Chapter 2

Context

- Provide a context for your project.
- Set out the objectives of the project
- Briefly list each chapter / section and provide a 1-2 line description of what each section contains.
- https://github.com/Sarlianth/fingerprint-auth

2.1 Filler

2.1.1 More filler

2.2 Filler

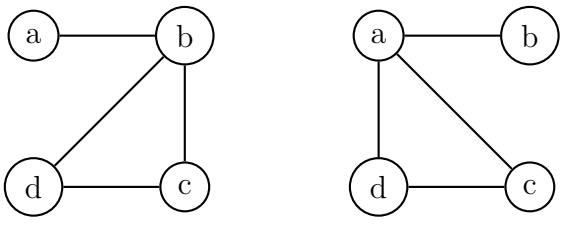
Chapter 3

Methodology

Describe the way you went about your project:

- Agile / incremental and iterative approach to development. Planning, meetings.
- What about validation and testing? Junit or some other framework.
- If team based, did you use GitHub during the development process.
- Selection criteria for algorithms, languages, platforms and technologies.

Check out the nice graphs in Figure 3.2, and the nice diagram in Figure **??**.



G_1 G_2

Figure 3.1: Nice pictures

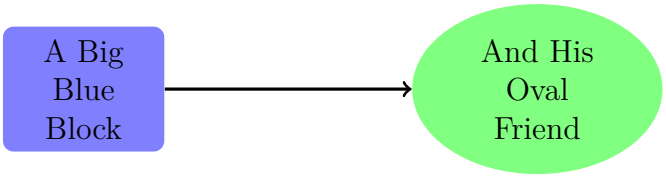


Figure 3.2: Nice pictures

Chapter 4

Technology Review

- Describe each of the technologies you used at a conceptual level. Standards, Database Model (e.g. MongoDB, CouchDB), XMl, WSDL, JSON, JAXP.
- Use references (IEEE format, e.g. [1]), Books, Papers, URLs (timestamp) – sources should be authoritative.

4.1 XML

Here's some nicely formatted XML:

```
<this>
  <looks lookswhat="good">
    Good
  </looks>
</this>
```

Chapter 5

System Design

- Architecture, UML etc. An overview of the different components of the system. Diagrams etc... Screen shots etc.

Column 1	Column 2
Rows 2.1	Row 2.2

Table 5.1: A table.

Chapter 6

System Evaluation

- Prove that your software is robust. How? Testing etc.
- Use performance benchmarks (space and time) if algorithmic.
- Measure the outcomes / outputs of your system / software against the objectives from the Introduction.
- Highlight any limitations or opportuni-ties in your approach or technologies used.

Chapter 7

Conclusion

- Briefly summarise your context and ob-jectives (a few lines).
- Highlight your findings from the evalua-tion section / chapter and any opportuni-ties identified.

Bibliography

[1] A. Einstein, "Zur Elektrodynamik bewegter Körper. (German) [On the electrodynamics of moving bodies]," *Annalen der Physik*, vol. 322, no. 10, pp. 891–921, 1905.