Project Tender

Project:
Instant Messaging Aggregator for Android

Client: Will van Heerden

Team: <undecidables>

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Jason Richard Evans *13032608*
Renette Ros *13007557*
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Contents

1 The Team

1.1 Elzahn Botha

1.1.1 Interests

- Video Games

- Game development

- Programming

- Anime

1.1.2 Technical Skills

- I have already been exposed to Java and been working with it for about a year now

1.1.3 Past Experience

- I have experience in writing programs and systems in Java

1.1.4 Non-Technical Strengths

- Hard and dedicated worker

- Always ready to learn new technologies and languages

- Functions best under pressure

1.1.5 Why I want to do this project

This project seemed like it would be a rather interesting project to do as well as the fact that it would be great exposure to a whole new side of IT that I have not yet had the privilege of delving into. I believe that by doing this project I will get valuable exposure that can later help in other projects that I might attempt. This project also seems like it would be a good challenge since I am more comfortable with smaller projects and systems and by doing a larger project such as this it will help me broaden my range of capabilities. Lastly due to the size of the project and the strict time line the pressure will be greatly increased helping me to work at my best without losing interest with the project.

1.2 Jason Richard Evans

1.2.1 Interests

stuff

1.2.2 Technical Skills

stuff

1.2.3 Past Experience

stuff

1.2.4 Non-Technical Strengths

stuff

1.2.5 Why I want to do this project

stuff

1.2.6 Non-Technical Strengths

stuff

1.2.7 Why I want to do this project

stuff

1.3 Renette Ros

1.3.1 Interests

- Reading

- Playing Games

- Painting

- Puzzles and problem solving

- Programming

- New interesting technologies

1.3.2 Technical Skills

- Java

- C++

- Web Development

- HCI - User Experience and User interface design

- XML, XML Schemas and related technologies.

- Good at identifying possible problems and debugging code

1.3.3 Non-Technical Strengths

- Hard Worker

- I don't like to do things halfway

- I learn new technologies easily

- I'm very enthusiastic about things I'm interested in.

1.3.4 Why I want to do this project

I want to do this project because I think integrating the different instant messaging services, using their api's and keeping the system pluggable) will be an interesting challenge. I am also interested in this project because it is a useful real-world application that I can see myself using. I believe this project will give me valuable experience in using api's from web-based services and also in developing for android. I have a lot of knowledge about HCI and I believe this will be a good project to apply it.

1.4 Szymon Ziolkowski

1.4.1 Interests

- Networks
- Security
- Computer hardware and electronics
- Paintball
- Video games

1.4.2 Technical Skills

- C# and Java
- Web development
- SQLite, MySQL and SQL Server

1.4.3 Past Experience

I have no past experience that might be relevant to the project.

1.4.4 Non-Technical Strengths

- Don't give up easily
- Helpful

1.4.5 Why I want to do this project

1.5 Vivian Laura-Lee Venter

1.5.1 Interests

stuff

1.5.2 Technical Skills

stuff
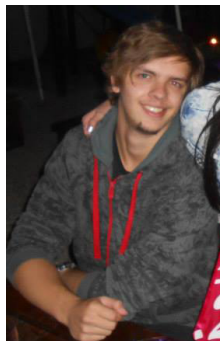
1.5.3 Past Experience

stuff

1.5.4 Non-Technical Strengths

stuff

1.5.5 Why I want to do this project

stuff

1.6 Tienie Pritchard

1.6.1 Interests

stuff

1.6.2 Technical Skills

stuff

1.6.3 Past Experience

stuff

1.6.4 Non-Technical Strengths

stuff

1.6.5 Why I want to do this project

stuff

2 Project Execution

2.1 Development Methodology

Our team will be using the **agile software development methodology**. The agile manifesto states that we find value in the following four points:

- **Individuals and interactions** over processes and tools.

- **Working software** over comprehensive documentation.

- **Customer collaboration** over contract negotiation.

- **Responding to change** over following a plan.

Although we find value in the items on the right, we value the items on the left, emphasised in bold, even more.

In agile development, the testing phase, which is usually separate from development in other methodologies such as Waterfall, runs concurrently with development. This increases the *quality* of the product and means that at any point in the development phase there will be a *working model* available with new features and functionality being added only after they pass vigorous testing.

The agile methodology has a proven low project schedule risk and the ability to respond to change, from the client or development team, quickly.

2.2 Keeping the Client Informed

- Wiki

- Weekly/Bi-Weekly Meeting

2.3 Initial Ideas on Solving Some Technical Challenges

- Social Network Messengers to be integrated:

- Finding existing APIs to communicate with each IM service

  - For example, via Facebook STK
  - SMSing easily be done on Android (i.e. ContentResolver)
  - ContentResolver can also load contacts

- Finding ways of associating contacts with each of the IM applications

  - Link based on name/first name
  - Cell Phone Number/E-mail
  - Storage of these associations and each contact from each IM application
  - We'll assume that each of the specified messenger's contacts are already stored on the user's mobile device, which we'll access via Android's STK

- Plugability

    - Use of Adapter design pattern

2.4 Technologies We Will Use

- Android Operating System

- Java

2.5 What the Client Will Receive

- A fully integrated (but basic) Instant Messaging Aggregator

- High quality interface design

- High quality UX design

- Good HCI

- Good performance from the application

- This application will be pluggable, allowing for easy integration of other IM applications