PROJECT DEFINITION DOCUMENT

Group 16:
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Contents

Project Charter

Project Name	SimplyFit		
Project Sponsor	Stella Kazamia	**Project Manager**	Rui Santos
Approval Date	26/2/19	**Last Revision Date**	14/3/19
Problem Definition and Project Description	Many people want to increase the amount that they walk every day but have a lack of motivation to do so. The main reason for this is that they have no support from others. By having an interactive app that allows people to connect and walk together it will boost the sense of a community and therefore create a more positive environment. Combining the benefits of working in a group and those of walking more will help a lot of people lead better and more enjoyable lifestyles. Our project will aim to meet these objectives in the form of an android application with a backend server. Firstly, there will be an interactive map allowing users to communicate with other users nearby. The second part will allow users to competitively track the number of steps they take in a day and share it with friends. The system will perform analytics on the data and rank each user from most steps to least steps. Step counts will reset every 24 hours at 00.00. The last 7 days of activity will be saved for viewing by the users. The application will passively gather data in the form of a user's step count. It will also record when a user types a message on the chat so that it can be uploaded and sent by the server. The server will have three main purposes: • Store the data – Steps, Users and Messages • Send the messages • Rank the steps The sensors that we will use are: • Location/GPS • Accelerometer • Camera With Internet Connection When the connection is present there will be full functionality, meaning the rankings will sync with the server and be up to date. The user will be able to load and send new messages. Without Internet Connection Only the last known rankings will be shown, and all messages received up until the last sync will be shown. Messages sent will be stored ready for sending and sent once a connection becomes available. The application will continue to count steps.		
Scope	The app will notify users of other users within a selected radius. Users will be able to add friends and chat with other users. Users will be able to count their steps walked for the day and compare statistics with other users.		
Constraints	**Time**	11 Weeks	
	Budget	**People** - 6 Developers **Money** – n/a	

Constraints (cont)	**Privacy**	**Collection of data –** The app must ask for permission before the app can track or record anything. The user must be aware of what is being recorded, when and how it is used. In this example the main issue will be location data. Location data will be tracked even when the app is running in the background. Users must agree to this before they can use the app. The app will also collect basic info including name, age, height, weight, email etc. **Use of collected data –** Once collected, the data must be stored securely. All data related to a user must be encrypted to prevent unauthorised people from retrieving the data. This is especially important in regard to location data as this could result in a serious privacy issue if not handled seriously. The user will be made aware of how the data will be stored. **GDPR and Data Protection Act** -The app must conform to all legal constraints including GDPR and Data Protection Act.	
Deliverables	**Week 3**		
	Project Definition		
	Week 6		
	Project Pitch		
	Week 7		
	Interim Audit Report		
	Week 7 Onwards		
	Group Scaling Audits		
	Week 11		
	Final Audit Report		
Project Team	**Role**	**Person**	**Individual Goal**
	Project Manager	Rui Santos	• To improve my leadership and teamworking skills. • Develop project management skills
	Technical Lead	Louai Sadrouai	• Improve teamwork with people that previously I didn't know • Working under pressure
	Documentation Lead	Mathew Slingsby	• Learn git/version control • Improve group work
	Design Lead	Tomas Sekstela	• Learn how to use android studio,

			• Be engaged in group work • Develop my design skills
	Primary Coding Team	Sachin Shah	• Improve team working and communication skills • Become more familiar with database design and using Firebase
		Reuben Sarkar	• Improving my technical ability with firebase and location-based android • Learning to use GitHub to develop an app with multiple developers

Risk Management

Risk	Probability	Impact	Solution
Failure to meet Interim Deadlines	Possible	Low-Medium	**Stage 1** – If the person responsible for the task that was not completed is aware that it may not be finished on time yet expects to have it completed soon after the deadline then no further action is required as long as the group is notified beforehand and kept up to date. **Stage 2 –** If the deadline has passed and it is clear that significant progress is needed to complete the tasks, extra resources will be appointed to help complete the task. These will be discussed with PM and appointed as needed. **Stage 3 –** If after extra resources have been allocated, there is evidence to suggest that the objective is still falling behind the primary focus of the group will turn to this task and the group will support the lead of that task to ensure it is completed.
Group member failing to show up for meetings without a reason	Possible	Low-Medium	PM will chair the meeting if the person scheduled to chair the meeting Is absent. In the event the PM is absent the technical lead will chair the meeting. If it becomes apparent that member(s) are frequently not attending meetings without reason or become unengaged with the project, the PM will discuss options with the member, however if resolution is not achieved, the group will discuss with Stella.
Loss of work	Very Unlikely	High	If part of the project is lost due to technical failure, the PM will appoint more resources if and where needed to catch up. The group will regularly back up all data to ensure that loss of work is unlikely.
Failure to meet a project objective.	Unlikely	High	If it appears that a certain aspect of the project will not be fulfilled in the given time irrelevant of extra resources. The group will discuss alternatives and present these to Stella in good time of any deadlines.

Team Charter

Purpose Statement and Group Objectives:

Our group has been formed to complete the Software Engineering assignment as part of the Computer Science degree. The overall objective is to produce the product we designed and produce a detailed final audit report, testing report and individual report for each group member. We are determined to commit to the project as a group and will effectively do this by the constant monitoring and writing up of meetings and discussions had together.

Analysis of Strengths and Developmental Needs:

To ensure that we achieve our main goal, we analysed the skill sets of each individual member of our group and how we could better use the skills to achieve our goal more efficiently.

Strengths:

- *Knowledge:*
  - Over 80% of our group has had previous experience with android development for at least a semester.
  - One member has knowledge of the business side of technology which is helpful for the production of documents like these.

- *Social Skill*
  - The group interacted well upon selection and all people are eager to do well in this project.
  - The group members have great communication skills enabling for a fast exchange of ideas and perspectives, enabling for a quicker and more efficient planning stage.

- *Background and Experience*
  - There is a mix of culture and backgrounds of our members which enable for a diverse exchange of different perspectives which works great in a group when planning.

Developmental Needs:

- Lack of professional experience in working in a software group
  - All group members are currently students and most have none/minimal previous experiences of working in a group developing software.

Functional Roles:

- Project Manager: Rui
- Technical Lead: Louai
- Platform Engineer: Reuben
- Documentation Lead: Mat
- Design Lead: Tomas
- Testing Lead: Sachin

Group Process Management:

Group meetings

Group meetings happen on every Monday and Thursday except when the group has holidays or decide to meet on a different day.

Decision-Making Procedure:

Group has an open discussion on recent issues then decides which steps to take to resolve the issues. Before agreeing on the final idea each member has an opportunity to make final comments regarding either the idea or unresolved issues. If the group can't decide upon the

idea, then it uses voting. We define a general agreement where all group members can claim that "I can and will support this idea even if it may not be the ideal decision".

Group Communications:
We are open to any kind of communication however electronic or phone communication is the most often used outside the meetings. Our main electronic communications platform is "Messenger" app. If the member of the group has any issues with the chosen communication platform, then there is a necessity to change the communication method**.**

Process Roles:
Group leader: Rui
Process Monitor: Louai
Recorder: Mat

Expectation of Group Members:

Responsiveness
Members are expected to be active and responsive in messages/group chats for quick communication between members. Critical for the success of the project as this will make the group more efficient.
Attendance at meetings
We expect everyone to attend the two meetings a week on Monday and Thursday. If a member is absent he/she will have to provide a valid excuse and a secondary person fills in for their role. Members are expected to arrive on time.
Participation
Members are expected to participate and engage in these meetings, putting forward their own ideas/opinions on various topics. Members are also expected to participate in group chat, to discuss further ideas.

Group Expectations Accepted By:

Mathew Slingsby	*M.Slingsby*	*18/3/19*
Reuben Sarkar	*R.Sarkar*	*18/3/19*
Louai Sadraoui	*L.Sadraoui*	*18/3/19*
Tomas Sekstela	*T.Sekstela*	*18/3/19*
Rui Santos	*R.Santos*	*18/3/19*
Sachin Shah	*S.Shah*	*18/3/19*

Assessment of Group Effectiveness:

After every group meeting, we conclude the meeting with a review at the end. This review summarises what we have accomplished in that meeting and which members participated in the discussions and idea exchange. The review also provides an effective progress tracker as we can track the development of the project by reading them and seeing what is achieved.

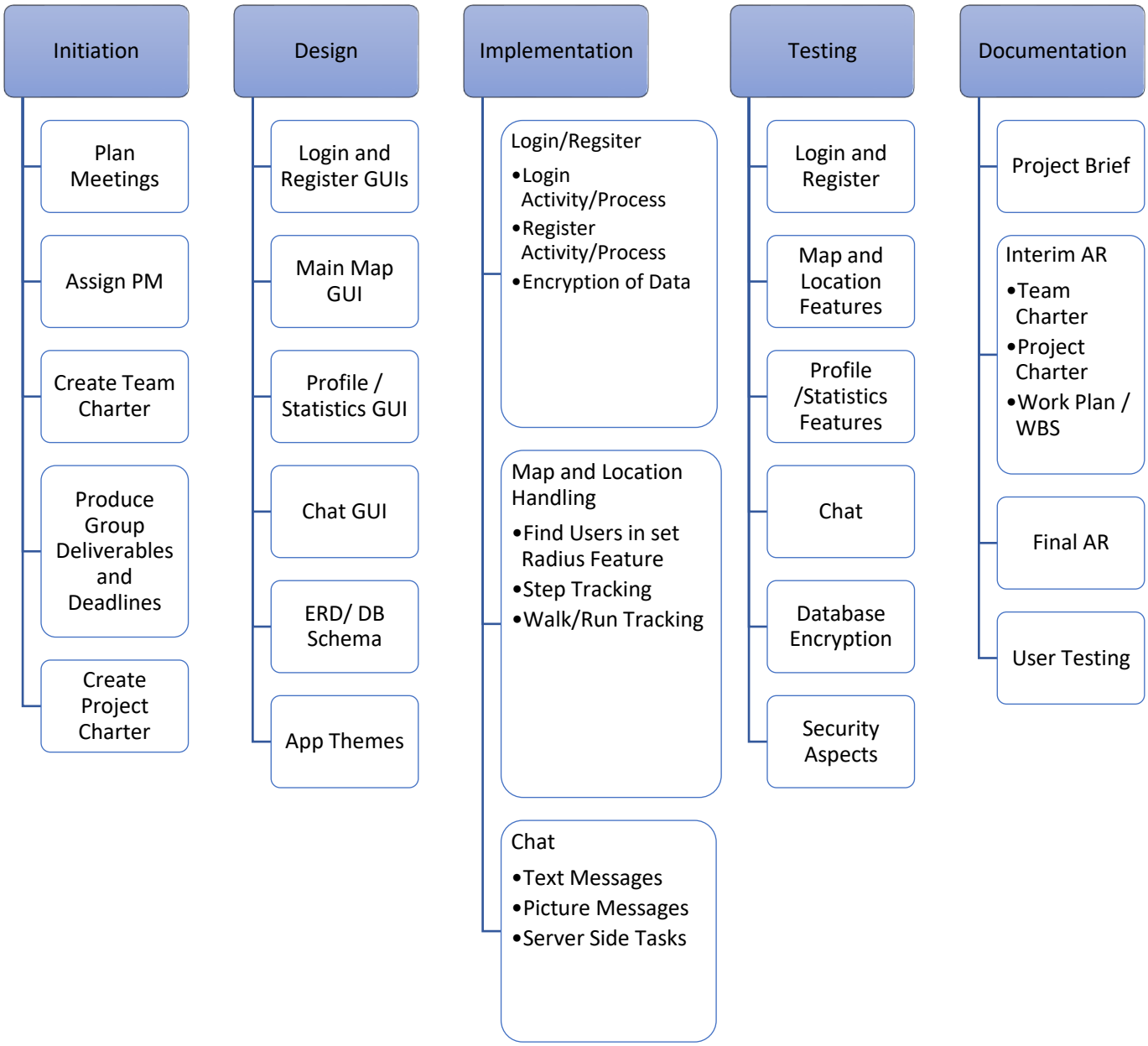
Work Plan and WBS

Work Plan

Item	Description	Success Criteria	Responsible	Sources/Resources
Login/Register	Responsible for the analysis, design, implementation of the Login and Register features. Each phase of development will be overseen by the relevant lead.	**Design –** All suitable GUIs have been designed and approved within group. UML created. **Implementation** – All objectives of the section have been met.	Louai	Android Studio, Violet UML, GitHub
Map/Steps	Responsible for the analysis, design, implementation of the Map and Step count features. Each phase of development will be overseen by the relevant lead.	Suitable test cases have been implemented and they all pass.	Mat and Reuben	Android Studio, Violet UML, GitHub, Google Maps API
Chat	Responsible for the analysis, design, implementation of the Chat feature. Each phase of development will be overseen by the relevant lead.		Tomas	Android Studio, Violet UML, GitHub, Firebase
Profile and Stats	Responsible for the analysis, design, implementation of the Profile and Stats features. Each phase of development will be overseen by the relevant lead.		Sachin Louai and Rui	Android Studio, Violet UML, GitHub
ERD/DB Schema	Responsible for the analysis and design of the database including ERD and Schema features.	• ERD created and approved by group. • Schema created from ERD and	Sachin and Rui	Android Studio, Violet UML, GitHub, Firebase

		• approved by group • Database implemented from schema.		
Documentation	Responsible for completing all relevant documents: • Project Brief • Interim Audit Report • Final Audit Report • User Testing Each document will be broken down into sub sections and divided amongst the group. One person will collate the information and display in one document.	All documents completed to a standard above the 70 -80 band. All documents submitted on time.	All (Collated by Mat)	-

Work Breakdown Structure (WBS)



Appendix

- Gantt.xls (Provided Separately)