CloudTooth File Transfer

Requirements Document

Revision 1.0
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Revision History

Revision	Date	Summary of changes
0.1	February 6, 2018	Initial version of document
0.5	February 8, 2018	Updated requirements
1.0	February 19, 2018	Finalized document

Executive Summary

This document entails the functional and nonfunctional requirements that are expected to be met by our final goal, which is to produce:

- end-user documentation
- technical documentation
- working software that meets the requirements specified within this document
- product brochure

All of this is to be produced by mid-May 2018.

Project Team

In order to produce the required deliverables, the following team members will collaborate

- Jai Punjwani (Android & back end development, Product Manager)
- Michael A. Agarenzo (full stack development)

Although team members have a primary role, both will help with all tasks.

Terminology

Client: Mobile or web application front end
Server: Intermediary Android device, which is in proximity to PC for Bluetooth connection
PC: Personal Computer from which user wants to retrieve files

User Stories

ID	I am a...	I want to be able to...	So that I can...
1	User	Register my Android device at home to connect to my PC via Bluetooth	View a list of files on my PC
			Transfer files from my PC to my Android device
2	User	Register my Android device on the cloud	Enable other devices to access those files
3	User	Connect other devices (mobile, computer) to the cloud	Access my transferred files from anywhere

Functional Requirements

Functional requirements describe what our product must be able to do. Each functional requirement has an identifier, a description, a prioritization and a milestone designator. The prioritizations include

MUST: product is not considered successful if this requirement is not met
SHOULD: team will make a substantive effort to include this requirement
COULD: if meeting the requirement does not impose a risk to the project
WON'T: team will not implement the requirement

ID	Requirement	Priority	Sprint	Comments

1	Server must be able to connect to PC via Bluetooth to list and transfer files.	MUST	1-2	
2	User must be able to access transferred files on server through the cloud	MUST	3	
3	Client must be able to view list of files and retrieve file from the cloud	MUST	4	
4	System must be able to register client devices to connect to Android server	MUST	5	
5	System could support USB file transfer in addition to Bluetooth	COULD	6	

Non-Functional Requirements

ID	Requirement	Priority	Comments
1	PC must only communicate with client's Android device	MUST	Security
2	System must support Android client and Web Application client	MUST	
3	All non-Bluetooth communication must be done over SSL	MUST	Security
4	System should support transfer of file up to 25 MB via Bluetooth (standard email attachment size)	SHOULD	
5	Cloud server should be hosted on AWS Elastic Beanstalk	SHOULD	Decision 1
6	Backend hosted on cloud server should be written using Python/Django	SHOULD	Decision 2
7	PC background process should be written in Java	SHOULD	Decision 3