Software Requirements Specification for SE 4G06, TRON 4TB6: subtitle describing software

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Revision History

Date	Version	Notes
Date 1	1.0	Notes
Date 2	1.1	Notes

1 Project Drivers

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- 1.2 The Stakeholders
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- 1.4.2 Relevant Facts and Assumptions
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- 1.4.4 Assumptions

2 Functional Requirements

Definitions of All Terms, Including Acronyms, Used by Stakeholders Involved in the Project. Definitions of All Terms, Including Acronyms, Used by Stakeholders Involved in the Project

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2.1 The Scope of the work and the Product

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2.1.1 Context Diagram

2.1.2 Individual Product use Cases

2.2 Functional Requirements

Requirement No	FR-1
Description	The device is able to pick up sounds in the environment of
	the user.
Fit Criterion	The data received by the device shall match the sounds sup-
	plied to the device's surroundings.
Dependencies	N/A

Requirement No	FR-2
Description	The device has to be able to classify different sounds.
Fit Criterion	Will compare test sounds and the device classifications shall
	match the true classification of the sounds.
Dependencies	FR-001, FR-003

Requirement No	FR-3
Description	The device has to be able to set or change its classification.
Fit Criterion	The sound classifications shall match the sent classifications.
Dependencies	N/A

Requirement No	FR-4
Description	The device is able to provide feedback to the user.
Fit Criterion	The feedback should alert the user that the device is trying to communicate some information.
Dependencies	N/A

Requirement No	FR-5
Description	The feedback provided is the appropriate feedback.
Fit Criterion	The feedback shall convey what signal classification was de-
	tected.
Dependencies	FR-002, FR-004

3 Non-Functional Requirements

3.1 Look and Feel Requirements

3.1.1 Appearance Requirements

Requirement No	NFR-1
Description	
	• The UI of the application will contain a home page that displays the company logo and an option to pair the device.
	• The UI of the application will have buttons which will have different colors for different functionalities.
	• The UI will have a separate page for pairing the device and a page for configuring which voices you want to be alerted by.
	• The device will be a uniform material finish and contain an on button and Bluetooth pairing button.
	• The device will have a distinguished charging port built into the finished material.
Fit Criterion	Check that the UI and Device satisfy mandated requirements.
Dependencies	N/A

3.1.2 Style Requirements

Requirement No	NFR-2
Description	
	• The UI will use consistent buttons, fonts, and color palette.
	• The device will automatically begin the pairing process when button is pressed
	• Buttons on the UI should be easily identified and responsive.
Fit Criterion	Check that all buttons of the UI and the Device correctly communicate back.
Dependencies	N/A

3.2 Usability and Humanity Requirement

${\bf 3.2.1}\quad {\bf Ease\ of\ Use\ Requirements}$

Requirement No	NFR-3
Description	
	 The Device shall be usable by any user with basic understanding of mobile applications and bluetooth devices. The product should provide support that assists users in avoiding mistakes.
Fit Criterion	Need To add content here!!
Dependencies	N/A

3.2.2 Personalization and Internationalization Requirements

Requirement No	NFR-4
Description	
	• Devices should allow users to pick and choose their desired sounds to be notified by.
	• Application of the product should allow users to choose preferred language
	• User Manual for the device will be written in primary language of each region device is sold
Fit Criterion	Need To add content here!!
Dependencies	N/A

3.2.3 Learning Requirements

Requirement No	NFR-5
Description	This Device and the corresponding application shall be able
	to be used by users with no prior training within 5 minutes.
Fit Criterion	Need To add content here!!
Dependencies	N/A

3.2.4 Understandability and Politeness Requirements

Requirement No	NFR-6
Description	The device and the application will use icons when the icon is
	commonly associated with a standard action such as a blue-
	tooth logo for pairing.
Fit Criterion	Need To add content here!!
Dependencies	N/A

3.2.5 Accessibility Requirements

Requirement No	NFR-7
Description	Anybody who can operate a mobile device and is capable of
	wearing a ring/bracelet will be able to operate the device.
Fit Criterion	Need To add content here!!
Dependencies	N/A

3.2.6 Convenience Requirements

Requirement No	NFR-004
Description	
	• Devices should allow users to pick and choose their desired sounds to be notified by.
	• Application of the product should allow users to choose preferred language
	• User Manual for the device will be written in primary language of each region device is sold
Fit Criterion	Need To add content here!!
Dependencies	N/A

3.3	Performance Requirements
3.3.1	Speed and Latency Requirements
3.3.2	Safety-Critical Requirements
3.3.3	Precision or Accuracy Requirements
3.3.4	Reliability and Availability Requirements
3.3.5	Robustness or Fault-Tolerance Requirements
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3.5.2	Supportability Requirements
3.5.3	Adaptability Requirements
3.6	Security Requirements

asdasdasd

- 3.6.1 Access Requirements
- 3.6.2 Integrity Requirements
- 3.6.3 Privacy Requirements
- 3.6.4 Audit Requirements
- 3.6.5 Immunity Requirements
- 3.7 Cultural Requirements
- 3.7.1 Cultural Requirements

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- 3.8 Legal Requirements
- 3.8.1 Legal Compliance Requirements
- 3.8.2 Standards Compliance Requirements
- 3.9 Health and Safety Requirements
- 4 Monitor and Control variables Taranjit
- 5 Traceability Everyone at end, needs 2 and 3 done first
- 5.1 Traceability Matrix
- 6 Project Issues Taranjit Jordan
- 6.1 Requirements Likely/Unlikely to Change
- 6.2 Off-the-Shelf Solutions
- 6.3 Tasks
- 6.3.1 Project Planning
- 6.3.2 Planning of the Development Phases
- 6.4 Costs
- 6.5 User Documentation and Training
- 6.6 Risks
- 6.7 Future Developments

References

Reflection Appendix

Please include an Appendix in your SRS documents that reflects on the graduate attribute of lifelong learning. The reflection should answer two questions:

What knowledge and skills will the team collectively need to acquire to successfully complete this capstone project? Examples of possible knowledge to acquire include domain-specific knowledge from the domain of your application, software engineering knowledge, mechatronics knowledge or computer science knowledge. Skills may be related to technology, writing, presentation, team management, etc. You should look to identify at least one item for each team member.

For each of the knowledge areas and skills identified in the previous question, what are at least two approaches to acquiring the knowledge or mastering the skill? From the identified approaches, which will each team member pursue, and why did they make this choice?

The Appendix does not need to be long. One or two pages should be adequate.