Software Requirements Specification (SRS) Document

VR headset based glaucoma screening tool , Team No: 37 ,
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Brief problem statement

Identifying an eye disease called glaucoma. The app aims to simulate the actual test called visual field test (VFT) in android app and integrating with a VR headset.

System requirements

Front End: Unity, C#

Back End: Node/Firebase with mongodb.

Users profile

Patient: Any patient in the age range (10 to 70 years) can use this software as a preliminary testing tool to detect early onset of Glaucoma. Patients with little to no experience with VR apps or mobile apps are expected hence the UI should be beginner friendly.

Doctor: Doctors should be able to receive a comprehensive report with all patient details.

Feature requirements (described using use cases)

No.	User Case Name	Description	Release
1	Patient	Patient Details: Patient adds details like name, age, gender.	R1
2	Patient	Instructions: Patient receives instructions on how to use the VR headset.	R1
3	Patient	Instructions: Patient receives instructions on how to proceed with the test	R1
4	Patient	Test: Patient undergoes the actual test.	R1
5	Doctor	Report: Doctor receives the report with specific indicators.	R2

Use case description

Use Case Number:	UC01
Use Case Name:	Patient Details
Overview:	Patient adds details like name, age, gender.
Actors:	Patient
Pre condition:	Patient should have received introductory message and form to fill details.
Flow:	1. Patient will be asked if he is a returning user or new 2. Patient enters details based on response
	Alternate Flows: User can choose an option to go back to Main Menu
Post Condition:	Patient Details are saved in database.

Use Case Number:	UC02/3
Use Case Name:	Instructions
Overview:	Patient receives instructions on how to use the VR headset and then how to proceed with the test
Actors:	Patient
Pre condition:	Patient should have entered his details.
Flow:	1. Patient will be asked to view instructions or to skip them 2. Patient will see appropriate instructions on screen.
	Alternate Flows: User can choose an option to go back to Main Menu
Post Condition:	Patient can proceed to the test

Use Case Number:	UC04
Use Case Name:	Report
Overview:	Patient undergoes the VFT test.
Actors:	Patients
Pre condition:	Patient should have entered his details and have read the instructions. Bluetooth clicker should be paired properly.
Flow:	1. Patient will be asked if we wants to start the test. 2. Patient clicks Bluetooth clicker if he sees the light on his field of view.
	Alternate Flows: User can opt to stop the test during any point in the test. He/she will be redirected to enter his/her details again.
Post Condition:	Report is generated and sent to the doctor.

Use Case Number:	UC05
Use Case Name:	VFT test report
Overview:	Doctor receives the report with specific indicators.
Actors:	Doctor
Pre condition:	Patient completes the test before report generation
Flow:	1. Doctor receives patient details 2. Doctor is sent a graph-based report with specific indicators.
	Alternate Flows: If false trigger detection system detects too many red flags, doctor is informed so he can repeat the test.
Post Condition:	Report is saved in database along with patient details.