Project Design Phase-II Solution Requirements (Functional & Non-functional)

Date	14 October 2022
Team ID	PNT2022TMID13597
Project Name	Project – Visualizing and predicting heart disease with an interactive dashboard
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Facebook
		Registration through Gmail
		Registration through google
FR-2	Account creation	Gmail and password for account creation
FR-3	User Confirmation	Confirmation via Email
		Confirmation via OTP
FR-4	Personal details for account	Name, age, sex, height, weight, previous medical records, etc for health account basic details
FR-5	Regular medical condition updation in app	Entry present medical records, symptoms, etc

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Good mobile navigation will boost the usability of
		the entire product, helping users to enjoy all the
		features offered. Bad navigation will make it difficult
		to find things, making it less likely that users will
		ever experience the product the way the design
		team had envisioned. Our solution has better
		features in navigation such as hamburger menu,
		Bottom navigation, Top navigation, Cards, Tabs,
		Gesture-Based Navigation, Full-screen navigation,
		3D touch. In our app, we're using general language
		English to make the app user-friendly

NFR-2	Security	To preserve user trust and device integrity is done
		by making your app more secure. Our solution
		proposes
		Provide the right permissions- Request only
		the minimum number of permissions
		necessary for your app to function properly.
		When possible, relinquish permissions when
		your app no longer needs them.
		2. Store data safely- Store private data within
		internal storage
		Ask for credentials before showing sensitive information
		4. Keep services and dependencies up to date
		5. Apply network security measures such as Add a network security configuration
		6. Use WebView objects carefully- WebView
		objects in your app shouldn't let users
		navigate to sites that are outside of your
		control. Whenever possible, use an allow list
		to restrict the content loaded by your
		app's WebView objects.
		7. Disallow access to your app's content
		providers-Unless you intend to send data
		from your app to a different app that you
		don't own, explicitly disallow other
		developers' apps from accessing your app's
		Content Provider objects.
NFR-3	Reliability	Our app is made accessible whenever
	•	needed.
		2. It Responds within the time frame needed
		3. It is regularly updated or modified as
		needed by the user.
		4. Provide security and privacy to the extent
		needed by the user.
		5. Provide bug free operation that is simple
		and easily predictable
NFR-4	Performance	Our app responds quickly by making
		application size small, using CDN & app
		bundles and produces the output and it
		takes lesser session length
		Our app provides unique solution than the present system in the software
		3. Special team is formed to reply queries of
		the users 24/7
		4. Our app provides real time notifications
		about the user condition.
NFR-5	Availability	By setting up An Application Performance
	,	Monitoring (APM) system that helps to monitor the
		availability of application. Consistent performance
		monitoring and optimization help you to tackle
		issues as quickly as they show up. Our app is
		designed in such a way that to emphasize availability
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		by spreading data across clusters so that if one fails the entirety of the data is not lost.
NFR-6	Scalability	A scalable app can easily accommodate double, triple, or even ten times its current amount of users by withstanding no crashes, no downtime, Fast loading speeds, Top-notch security. We're gonna make our app more scalable by using right Tech stack & Infrastructure scaling to process millions of data with bug free, multiple database servers that accommodate millions of user to secure our app's fail-safe performance, using caching and stateless approach to reduce the load, Content Delivery Networks (CDN) to minimal response time.