

APPENDIX B

TABLE 6: INITIAL CODES/THEMES (1ST ITERATION).

Themes	Codes	Definition
User Needs	Pragmatic elements	These are related to the usability and the do-goal qualities. Goal-oriented qualities: How well the app helps users achieve their objectives.
	Hedonic elements	Stimulation: Emotional engagement, enjoyment of using the app. Experience-related qualities: Fulfillment of users' emotional needs and desires.
App	Brand elements	Marketing and business communications between the user and the organization.
	Technology elements	UX Designs (UXD) elements: UI designs that impact user interaction and experience.
		Development Technology elements: Technologies used in app development affecting its functionality and performance.
		Hardware elements: Infrastructure on the client or server side influencing app performance.
		Operation elements: Technologies used for monitoring production and responding to user needs.
Context	Context elements	Factors linked to the environment where the interaction with the application occurs.

TABLE 7: FINAL CODES/THEMES AFTER SEVERAL ITERATIONS.

Themes	Codes		Definition
User-Centric Dimension	I. Foundational UX Elements	1-Pragmatic	These are related to the usability and the do-goal qualities of how well the app helps users achieve their objectives.
	II. Hedonic Elements	1-Emotional Design	This focuses on fulfilling users' emotional needs and desires.
		2-Gamification	This leverages game mechanics such as points, badges, and leaderboards to enhance user motivation and engagement.
	III. Cognitive UX Elements	1- Mental Models & Load Management	This involves ensuring that the app's design aligns with users' existing mental models, making learning and navigating easier, while also minimizing the cognitive effort required for users to interact with the app. By simplifying complex tasks, providing clear instructions, and minimizing distractions, designers can help users focus on their goals more effectively, reducing frustration and errors.
	IV. Physical Ergonomics	1- Physical Interaction	Refers to the physical aspects of user interaction with the app, including touch input, typing on a keyboard, or navigating through interface elements. Design considerations aim to optimize these interactions for user comfort and efficiency, minimizing physical strain and discomfort.
App-Centric Dimension	I. User Interface (UI) Elements	1-Visual Design	This involves shaping the app's UI elements, aesthetics, including layout, color scheme, typography, and imagery, to create a visually appealing and cohesive experience.
	II. Ethical Design Elements	1-Privacy and Data Protection	This addresses concerns related to safeguarding user privacy and data security. It involves implementing transparent data practices, robust security measures, and user-friendly privacy controls to build trust and ensure regulation compliance.
		2- Content Credibility	This emphasizes the ethical responsibility of presenting accurate and honest information to users. Ensuring content credibility contributes to building user trust and confidence in the app's content, fostering a positive user experience.
	III. Supportive Elements	1-Technical Considerations	This includes infrastructure and technologies used in app development or for monitoring production and responding to user needs, which affect its functionality and performance and compatibility with various devices and operating systems to ensure smooth operation across different platforms and environments.
Context Dimension	I. Contextual UX Elements	-	This involves factors linked to the environment where the interaction with the application occurs and tailors the app experience to individual users based on their preferences, behavior, and context.