

Category	Technology/Tool	Version	Purpose
Frontend	React	v18.2.0 or above	Building the user interface with a component-based architecture.
	Vite	v4.4.5 or above	Fast build tool and development server.
	Chart.js	v4.4.0 or above	Creating interactive and responsive charts and graphs.
	HTML	5.0	Markup language for creating web pages.
	CSS	3.0	Styling web pages and ensuring a responsive design.
	Bootstrap	v5.3.2	CSS framework for pre-built components and responsive grid layout.
	Django	v4.2.7	High-level Python web framework for backend development.
Database	SQLite	3	Lightweight, serverless relational database management system (RDBMS).
Operating System	Windows	11	Development and testing environment.
IDE	VSCode	LTS version	Code editor with language support and productivity extensions.
Version Control	SVN	-	Used during earlier stages of development for version control.
	GitHub	-	Current platform for version control and collaboration.
API Documentation	Swagger	Latest	Documenting APIs and providing a user-friendly interface for testing.
Diagrams & Designs	Microsoft Visio	-	Creating architecture and system design diagrams.
	Microsoft Whiteboard	-	Creating screen design mockups and initial wireframes.
	PlantUML	-	Generating Entity-Relationship (ER) diagrams for database relationships.

7. Implementation

• 9.1 Development Environment

- Tools, technologies, and frameworks used.