IV.1 Overview

• Web

- o Major module: Use a Framework as backend,
- Minor module: Use a front-end framework or toolkit.
- Minor module: Use a database for the backend.
- o Major module: Store the score of a tournament in the Blockchain.

• User Management

- Major module: Standard user management, authentication, users across tournaments.
- Major module: Implementing a remote authentication.

Gameplay and user experience

- o Major module: Remote players
- Major module: Multiplayers (more than 2 in the same game).
- Major module: Add Another Game with User History and Matchmaking.
- Minor module: Game Customization Options.
- Major module: Live chat.

• AI-Algo

- Major module: Introduce an AI Opponent.
- o Minor module: User and Game Stats Dashboards

Cybersecurity

- Major module: Implement WAF/ModSecurity with Hardened Configuration and HashiCorp Vault for Secrets Management.
- Minor module: GDPR Compliance Options with User Anonymization, Local Data Management, and Account Deletion.
- Major module: Implement Two-Factor Authentication (2FA) and JWT.

Devops

- o Major module: Infrastructure Setup for Log Management.
- Minor module: Monitoring system.
- Major module: Designing the Backend as Microservices.

• Graphics

• Major module: Use of advanced 3D techniques.

• Accessibility

• Minor module: Support on all devices.

o Minor module: Expanding Browser Compatibility.

• Minor module: Multiple language supports.

• Minor module: Add accessibility for Visually Impaired Users.

• Minor module: Server-Side Rendering (SSR) Integration.

• Server-Side Pong

- Major module: Replacing Basic Pong with Server-Side Pong and Implementing an API.
- **Major module**: Enabling Pong Gameplay via CLI against Web Users with API Integration.