**Project Planning Phase**

**Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)**

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| --- | --- |
| Date | 15 February 2025 |
| Team ID | SWTID1743254297 |
| Project Name | TUNETRAIL- YOUR PATHWAY TO PERFECT PLAYLIST |
| Maximum Marks | 5 Marks |

**5. PROJECT PLANNING & SCHEDULING**

**5.1 Project Planning**

The development of the Music Streaming Website is planned over distinct phases to ensure efficient resource utilization, timely delivery, and proper testing. The project follows an agile methodology with iterative development and continuous integration.

**Phases of Development:**

1. Requirement Analysis
   * Identifying core features for users and artists
   * Defining tech stack (MERN, JWT, cloud storage)
2. UI/UX Design
   * Creating wireframes and mockups
   * Designing responsive layouts for desktop and mobile
3. Backend Development
   * Setting up MongoDB schema and Express.js APIs
   * Implementing user authentication using JWT
   * Handling file uploads with cloud integration (e.g., Cloudinary or AWS S3)
4. Frontend Development
   * Developing React components for music browsing, playlist, user profile
   * Integration of media player and streaming functionality
   * Implementing Redux or Context API for state management
5. Testing & Debugging
   * Unit testing for API endpoints
   * Frontend component testing
   * Manual testing for UI/UX and music playback
6. Deployment & Hosting
   * Hosting frontend and backend (e.g., Vercel/Netlify + Render/Heroku)
   * Connecting domain and SSL configuration
7. Maintenance & Feedback Integration
   * Regular updates based on user feedback
   * Performance optimization and bug fixes

**Estimated Timeline:**

| Phase | Duration | Status |
| --- | --- | --- |
| Requirement Analysis | Week 1 | Completed |
| UI/UX Design | Week 2 | Completed |
| Backend Development | Week 3–4 | Completed |
| Frontend Development | Week 4–5 | Completed |
| Testing & Debugging | Week 6 | Completed |
| Deployment | Week 7 | Completed |
| Feedback & Maintenance | Week 8+ | Completed |

