Team Charter

1. Team Name: Byte On

2. Mission and Vision

Mission:
To create an innovative platform that seamlessly merges art and music, empowering artists to elevate their creative process through real-time, mood-adaptive musical experiences. Our mission is to foster creativity and inspiration by providing a dynamic, interactive environment that enhances both auditory and visual artistic expression.

Vision:
To revolutionize the creative landscape by integrating artistic and musical innovation, inspiring a global community of artists to explore new dimensions of creativity and self-expression. Through advanced technology and user-centric design, we aim to break down the barriers between visual and auditory art, enabling a harmonious and immersive creative journey.

3. Team Members and Roles

- **Atharva Swami:**

  Role: Team Lead

  Responsibilities: Create and assign tickets to team members for task management and accountability. Conduct regular progress meetings to identify and address roadblocks, ensuring alignment across the team. Perform code reviews and testing to maintain quality standards and ensure functionality. Provide support to teams or individuals facing challenges to guarantee timely project delivery.

- **Sneh Shah:**

  Role: Machine Learning Engineer

  Responsibilities: Develop and implement ML models to analyze music features for mood detection, enabling dynamic visual adaptations. Optimize real-time performance, collaborate with the backend team for seamless integration, and refine algorithms.

- **Ravneet Kaur:**

Role: Backend Developer

Responsibilities**:** Implement server-side logic and APIs for seamless performance ensuring efficient request handling, create and manage secure database schemas and data pipelines to handle user data and artwork, and integrate ML models.

- **Ishita Mehta:**

  Role: Backend Developer

  Responsibilities: Implement server-side logic and APIs for seamless performance ensuring efficient request handling, create and manage secure database schemas and data pipelines to handle user data and artwork, and integrate ML models.

- **Harsh Chheda:**

  Role: Front End Developer.

  Responsibilities: Develop an intuitive and responsive user interface, implement seamless integration with backend APIs for real-time music generation, create dynamic music visualization features, optimize rendering performance for the drawing canvas and music playback, conduct thorough testing of UI components, enhance accessibility for all users, implement feedback mechanisms for user input.

- **Rishabh Budhia:**

  Role: Front End Developer.

  Responsibilities: Develop an intuitive and responsive user interface, implement seamless integration with backend APIs for real-time music generation, create dynamic music visualization features, optimize rendering performance for the drawing canvas and music playback, conduct thorough testing of UI components, enhance accessibility for all users, implement feedback mechanisms for user input.

- **Anannya Patra:**

  Role: UI/UX Designer

  Responsibilities: Design an intuitive, responsive and visually engaging user interface that guides users through creating drawings and receiving personalized music playlists, ensuring an aesthetically pleasing and user-friendly experience. Identify user needs, design interaction models and continuously test and refine the design to ensure it meets user expectations.

- **Sai Varnitha Reddy**:

  Role: UI/UX Designer

  Responsibilities: Design an intuitive, responsive and visually engaging user interface that guides users through creating drawings and receiving personalized music playlists, ensuring an aesthetically pleasing and user-friendly experience. Identify user needs, design interaction models and continuously test and refine the design to ensure it meets user expectations.

- **Shalin Shah**:

  Role: Machine Learning Engineer

  Responsibilities: Develop and implement ML models to analyze music features for mood detection, enabling dynamic visual adaptations. Optimize real-time performance, collaborate with frontend teams for seamless integration, and refine algorithms.

4. Decision-Making Process

i. Leadership Authority:
The team lead, Atharva Swami, will serve as the primary decision-maker for high-level strategic and project-critical decisions, such as prioritizing features, resolving conflicts, and managing timelines. Atharva will ensure that decisions align with the project goals, milestones, and deliverables.

ii. Consensus-Building:
For most decisions, the team will prioritize consensus-building. Discussions will be held during regular progress meetings, where team members can share ideas, voice concerns, and present suggestions. The team will encourage collaboration and open communication to ensure all perspectives are considered.

iii. Voting Mechanism:
If consensus cannot be reached within a reasonable timeframe, the team will use a voting mechanism to finalize decisions:

- Each team member will cast a vote.
- A simple majority (50% + 1) will determine the outcome.
- In case of a tie, the team lead will have the final say.

iv. Specialized Input:
Decisions related to specific domains (e.g., machine learning, backend, frontend, or UI/UX design) will defer to the expertise of the respective team members or sub-teams. For instance:

- Machine learning decisions: Sneh Shah and Shalin Shah.

- Backend development: Ravneet Kaur and Ishita Mehta.
- Front-end and UI/UX design: Harsh Chheda, Rishabh Budhia, Anannya Patra, and Sai Varnitha.

v. Documentation:
All decisions will be documented in a shared project management tool (e.g., Jira or ClickUp) or a dedicated document for future reference. This ensures transparency and accountability.

vi. Iterative Feedback:
The team will adopt an iterative approach, regularly reviewing the impact of decisions and revisiting them if necessary. Feedback from testing, user input, and team observations will guide any adjustments.

5. Communication Plan

i. Tools for Communication:
To ensure effective and streamlined communication, the team will use the following tools:

- **Slack:** Primary tool for day-to-day communication, instant updates, and quick discussions. Dedicated channels will be created for specific tasks (e.g., #frontend, #backend, #ml, #design).
- **Google Meet:** Used for virtual meetings, brainstorming sessions, and progress reviews when team members cannot meet in person.
- **Email:** For formal communications, sharing important documents, and external correspondence.
- **In-Person Meetings:** Scheduled as needed for detailed discussions, collaborative problem-solving, and sprint planning.
- **ClickUp:** Used for project management, task assignments, progress tracking, and maintaining a clear overview of deliverables and deadlines.

ii. Meeting Schedules:

- **Weekly Progress Meetings:**
  - Frequency: Once a week (every Sunday at 05:00 PM)
  - Purpose: Review progress, discuss challenges, set goals for the week.
  - Format: Hybrid (in-person or Google Meet based on availability).
- **Daily Standups:**
  - Frequency: Every weekday.
  - Purpose: Share brief updates on individual progress and any blockers (5–10 minutes).
- **Sprint Planning Meetings:**
  - Frequency: At the start of each sprint (bi-weekly).
  - Purpose: Define sprint goals, assign tasks, and prioritize deliverables.
  - Format: In-person or virtual via Google Meet.
- **Ad-Hoc Meetings:**

    - Scheduled as needed for addressing urgent issues or deep-diving into specific tasks or blockers.

6. Conflict Resolution

i. Open Communication:

- The first step in resolving conflicts is open and respectful communication. Team members involved in a conflict will meet to discuss the issue directly, share their perspectives, and attempt to resolve it amicably.
- A mediator (another team member or the team lead) may be present to ensure the conversation remains constructive and focused.

ii. Identify the Root Cause:

- The involved parties, along with the mediator, will work to identify the underlying cause of the conflict. This may involve reviewing project requirements, tasks, or miscommunications to ensure everyone has a shared understanding of the situation.

iii. Collaborative Problem-Solving:

- Team members will collaborate to find a solution that aligns with the project goals and accommodates individual concerns whenever possible.
- Compromises may be suggested to ensure the resolution benefits the team and project overall.

iv. Mediation by Team Lead:

- If the conflict remains unresolved, the team lead (Atharva Swami) will step in as the primary mediator.
- The team lead will review the situation, consider all perspectives, and propose a fair and balanced resolution.

v. Escalation:

- If the conflict involves technical disagreements or domain-specific issues, the matter may be referred to the team members with expertise in that area (e.g., ML engineers, backend developers, UI/UX designers) for an informed resolution.
- In rare cases where the conflict cannot be resolved within the team, it will be escalated to an external advisor, mentor, or supervisor for final resolution.

vi. Documentation and Follow-Up:

- All major conflicts and their resolutions will be documented to prevent similar issues in the future.
- Follow-up meetings may be scheduled to ensure the resolution is effective and that relationships within the team remain positive.

vii. Core Principles for Conflict Resolution:

- **Respect:** All discussions will be conducted with mutual respect and professionalism.
- **Focus on Goals:** The resolution will prioritize the success of the project and the team's objectives.
- **Timeliness:** Conflicts will be addressed promptly to avoid disruptions to workflow or morale.
- **No Blame Culture:** Emphasis will be placed on finding solutions rather than assigning blame.

By maintaining open communication and leveraging mediation and escalation when necessary, the team will ensure conflicts are addressed constructively and do not hinder the project's progress.

7. Project Goals and Deliverables

Minimum Viable Product (MVP):

- A working web application that incorporates the Spotify API, features a mood-based drawing canvas and includes basic user interaction functionalities.

Prototypes:

- Initial versions of the user interface demonstrating mood detection capabilities, drawing tools, and real-time collaboration.

Documentation:

- Technical manuals covering API integrations, machine learning models, and the overall system architecture.

Machine Learning Models:

- Models developed to analyze music mood and features through training.

Deployed Application:

- A hosted version of the application is available for users through the web.

Test Results:

- Reports detailing performance metrics, user feedback, and testing results.

Design Assets:

- UI/UX designs, wireframes, and adaptable visuals tailored for mood detection.

8. Ground Rules

1. Clearly communicate your availability and ensure timely responses to team communications during agreed-upon work/meeting hours.
2. Treat all team members with respect and value diverse perspectives.
3. Complete tasks and deliverables on or before the agreed-upon deadlines. Notify the team immediately if delays occur.
4. Provide regular updates on progress and communicate any roadblocks early.
5. Ensure all deliverables meet high-quality standards and align with the project requirements.
6. Prioritize the project's objectives and work collaboratively to achieve shared success.
7. Assist team members facing challenges and contribute to fostering a positive, supportive work environment.

9. Signatures

All team members must sign below to indicate their agreement with the team charter:

Name: Atharva Swami **Signature:** AS
Name: Sneh Shah **Signature:** SS
Name: Ravneet Kaur **Signature:** RK
Name: Ishita Mehta **Signature:** IM
Name: Harsh Chheda **Signature:** HC
Name: Rishabh Budhia **Signature:** RB
Name: Anannya Patra **Signature:** AP
Name: Sai Varnitha Reddy **Signature:** SVR
Name: Shalin Shah **Signature:** SS

Note: The sentences in this document were reviewed and rewritten using ChatGPT to ensure they are clear, concise, and free of grammatical errors.