

# REQUIREMENT GATHERING

---

**Date:** 28-06-2024

## 1. Project Overview:

**SkillVoyage** is an innovative online platform designed to provide a comprehensive solution for learning and showcasing various talents, including dance, music, drawing, karate, and more. It is segmented into three main modules: Admin, Students, and Guides (Instructors), each tailored to facilitate different aspects of talent development and community engagement.

### Challenges Addressed:

- **Limited Access to Talent Development Resources:** Many individuals struggle to find reliable resources for learning and showcasing their talents.
- **Fragmented Learning Experiences:** Learners often have to navigate multiple platforms for different skills and resources.
- **Lack of Community Engagement:** There is a need for a unified platform where learners and instructors can interact, share feedback, and foster a sense of community.
- **Equipment Availability:** Difficulty in accessing equipment necessary for practicing certain talents.

### Main Objectives:

- **Centralized Platform:** To create a comprehensive platform where users can learn and showcase a wide range of talents.
- **Enhanced User Experience:** To provide a user-friendly interface that makes it easy for users to enroll in courses, track progress, and showcase their skills.
- **Efficient Management Tools:** To enable administrators to efficiently manage content, users, and events.
- **Interactive Learning:** To facilitate interactive learning experiences through feedback mechanisms and community engagement tools.
- **Advanced Technologies:** To integrate ML and NLP technologies for personalized learning experiences and optimized user engagement.



## 2. System Scope:

**SkillVoyage** is proposed as a full-scale implementation aimed at providing a comprehensive, user-friendly platform for talent development and showcasing. The goal is to deliver a complete, ready-to-market solution that can be deployed for actual use by students, guides, and administrators.

### Extent of the System:

#### Full-Scale Implementation:

- **Commercial Use:** The system is designed to be a fully functional, commercial-grade platform ready for deployment in real-world scenarios.
- **End-to-End Solution:** It encompasses all necessary features and functionalities for a seamless user experience, from course management to talent showcasing.
- **Scalable Infrastructure:** Built to handle a large number of users and transactions, ensuring scalability as the user base grows.

#### Real-World Application:

- **User Engagement:** Targeted towards individuals interested in developing and showcasing their talents.
- **Community Integration:** Designed to foster a vibrant community where users can interact, share feedback, and participate in events.
- **Instructor Utilization:** Provides tools and features for guides to create courses, interact with students, and showcase their skills.

#### Comprehensive Features:

- **Learning Management:** A robust system for browsing, enrolling in, and tracking progress in various talent courses.
- **Showcase Platform:** A section for users to upload and share their talent-related content.
- **Equipment Marketplace:** Facilitates renting and buying equipment related to specific talents.
- **Communication Tools:** Integrated messaging and forums to facilitate interaction between students and guides.
- **Administrative Control:** Extensive management tools for administrators to oversee platform content, users, and events.

## 3. Target Audience:

**SkillVoyage** is designed to cater to a diverse range of users involved in talent development and showcasing. The main user groups are as follows:

- **Students:**



- **Individual Learners:** People looking to learn and develop various talents through structured courses and tutorials.
- **Community Members:** Individuals interested in engaging with like-minded people and showcasing their talents.
- **Guides (Instructors):**
  - **Professional Instructors:** Individuals who provide coaching and tutorials in various talents and need a platform to manage their courses and interact with students.
  - **Talent Showcasers:** Guides who want to display their skills and achievements to attract students.
- **Administrators:**
  - **Platform Managers:** Individuals responsible for managing user registrations, content moderation, event management, and platform analytics.

## 4. Modules:

There are three modules in this system:

1. Admin
2. Students
3. Guides (Instructors)

### 1. Admin Module:

- **Login:** Secure administrative access to system functionalities.
- **User Management:** Review and manage student and guide registrations.
- **Content Moderation:** Approve or disapprove courses and showcase content.
- **Reporting and Analytics:** Monitor platform usage, engagement, and feedback.
- **Notification System:** Communicate updates, reminders, and announcements effectively.
- **Event Management:** Manage platform events, webinars, and workshops.

### 2. Student Module:

- **Registration/Login:** Simple and secure user registration and login process.
- **Profile Management:** Update personal information and preferences.
- **Browse Courses:** Search and enroll in various talent courses.
- **Learning Dashboard:** Access enrolled courses, track progress, and view upcoming sessions.
- **Video Tutorials:** Stream and download course videos.
- **Showcase:** Upload videos or images to showcase their talents.
- **Community Interaction:** Engage in forums and group discussions.
- **Rent/Buy Equipment:** Browse and rent or purchase equipment related to their talents.
- **Event Notifications:** Receive notifications about upcoming events in their specific talent categories.



### 3. Guide (Instructor) Module:

- **Registration/Login:** Secure registration and login for instructors.
- **Profile Management:** Update professional information and preferences.
- **Course Creation:** Create and manage courses, including uploading video tutorials and materials.
- **Student Interaction:** Communicate with students via messaging or forums.
- **Feedback & Assessment:** Provide feedback on assignments and conduct assessments.
- **Profile Showcase:** Display their skills, qualifications, and achievements.

### 5. Detailed Functionalities:

#### Personalized Course Recommendation System:

- **Description:** ML-based recommendation system suggesting courses based on user interests and past activities.
- **Functionalities:** User-friendly interface, personalized recommendations, and analysis of user behavior and course data.

#### Sentiment Analysis for Feedback:

- **Description:** NLP-based sentiment analysis of course feedback to gauge user satisfaction and identify areas for improvement.
- **Functionalities:** NLP algorithms for parsing textual feedback, categorizing sentiments, and providing actionable insights.

#### Automated Content Summarization:

- **Description:** NLP algorithms summarizing course descriptions and content for quick and informative overviews.
- **Functionalities:** Extraction of key information and generation of tailored summaries for user preferences.

#### Progress Prediction:

- **Description:** ML models predicting student progress and performance based on historical data and learning patterns.
- **Functionalities:** ML algorithms analyzing learning data and providing insights for personalized learning paths.

#### Interactive Chatbot:

- **Description:** AI-powered chatbot offering real-time assistance and information related to course content, registration, and platform navigation.



- **Functionalities:** NLP integration for natural language understanding, conversational interactions, and support via web or mobile interface.

### Certificate Generation:

- **Description:** Automated generation of certificates upon course completion to validate students' achievements.
- **Functionalities:** Customizable certificate templates, automated issuance upon completion of course requirements, and secure storage and retrieval of certificates.

### Event Notifications:

- **Description:** Provide users with notifications about upcoming events related to their specific talent categories.
- **Functionalities:** Personalized event notifications, calendar integration, and event reminders.

## 6. User Roles:

**SkillVoyage** includes several distinct user roles, each with specific permissions and access levels to ensure efficient and secure operation of the platform.

### Admin:

- **Permissions and Access Levels:**
  - Full Access: Complete control over the platform's administrative functions.
  - User Management: Manage student and guide accounts.
  - Content Moderation: Oversee the approval and disapproval of courses and showcase content.
  - Reporting and Analytics: Access platform usage data and generate reports.
  - Event Management: Organize and manage platform events.

### Student:

- **Permissions and Access Levels:**
  - Course Enrollment: Browse and enroll in courses.
  - Showcase Talent: Upload and manage talent-related content.
  - Community Interaction: Participate in forums and group discussions.
  - Equipment Rental/Purchase: Access the marketplace for renting or buying equipment.
  - Event Participation: Receive notifications and participate in events.

### Guide (Instructor):



- **Permissions and Access Levels:**

- Course Management: Create and manage courses and tutorials.
- Student Interaction: Communicate with students and provide feedback.
- Profile Showcase: Display professional achievements and skills.
- Content Upload: Upload course materials and video tutorials.

## 7. System Ownership:

**SkillVoyage** is owned by an organization responsible for the overall management, maintenance, and development of the platform. The ownership structure ensures the system's continuity, scalability, and support for its users.

## 8. Industry/Domain:

**SkillVoyage** is related to the education and talent development industry domain. It primarily focuses on providing services related to learning and showcasing various talents. This domain involves aspects of e-learning, community engagement, and talent management tailored specifically for individuals looking to develop and showcase their skills. The platform aims to streamline operations for both learners and instructors, offering convenience and efficiency in talent development.

## 9. Data Collection Contacts:

- Mini Gopi, Dance Teacher: 8301054373, 9656448594
- Aswin, Music Instrument Coach: 8921712517
- Aby George, Taekwondo Trainer: 9747578870

## 10. Questionnaire for Data Collection

### 1. Do you currently have a platform for your talent teaching services?

Mini Gopi, Dance Teacher: "No, I don't have a dedicated online platform for my dance classes. Everything is managed through direct contact with students."

Aswin, Music Instrument Coach: "No, I primarily rely on in-person lessons and some occasional remote sessions through Zoom or Google meet, but no formal platform."

Aby George, Taekwondo Trainer: "No, all my classes and student interactions are handled offline or through direct phone communication."



## **2. If you were to get a platform, what essential features would you like it to have?**

Mini Gopi, Dance Teacher: "I would love to have easy tools for creating and managing dance courses, high-quality video tutorials for students to follow, and a section where they can upload their practice videos for feedback."

Aswin, Music Instrument Coach: "For me, it's important to have a robust course creation tool, high-quality video streaming and downloads for tutorials, and a feature where students can upload their practice recordings for review."

Aby George, Taekwondo Trainer: "A platform that offers structured course management, high-quality video lessons, and a way for students to upload their training videos for feedback would be essential."

## **3. How do you currently manage your student enrollments and schedules?**

Mini Gopi, Dance Teacher: "At the moment, students usually contact me through phone calls or WhatsApp to enroll. I keep track of schedules and student information manually in a notebook."

Aswin, Music Instrument Coach: "I handle enrollments through phonecalls or directly and maintain it to keep track of class schedules and student progress. "

Aby George, Taekwondo Trainer: "I manage everything through direct phone calls and messages. I also use a physical calendar to keep track of classes and appointments, which can get quite overwhelming."

## **4. What type of interaction would you like to have with your students on the platform?**

Mini Gopi, Dance Teacher: "It would be great to have a forum where students can ask questions and share videos of their practice. Real-time chat would also be useful for immediate feedback."

Aswin, Music Instrument Coach: "I would like to have a messaging system where I can communicate with students individually or in groups, and also a feedback feature where they can submit their practice recordings for review."

Aby George, Taekwondo Trainer: "A direct messaging system would be helpful, along with the ability to create group discussions for class announcements and interactive sessions."

## **5. What challenges do you currently face with equipment for your talent classes?**

Mini Gopi, Dance Teacher: "Finding and recommending the right dance accessories for students can be challenging. A platform that offers a marketplace for these items would be very beneficial."

Aswin, Music Instrument Coach: "Some students struggle to find quality instruments for practice. Having a rental or purchase option within the platform would be a huge help."





Aby George, Taekwondo Trainer: "It's difficult for students to source proper training gear. An integrated shop on the platform would simplify this process a lot."

## **6. How do you handle feedback and assessment for your students?**

Mini Gopi, Dance Teacher: "Currently, I give feedback verbally after classes. An online system where students can upload their practice videos for review would make this process more efficient."

Aswin, Music Instrument Coach: "Feedback is usually given during class or via email. An integrated feedback and assessment system would streamline this and allow for more detailed and structured critiques."

Aby George, Taekwondo Trainer: "I provide feedback during training sessions. An online assessment tool where students can receive detailed feedback and track their progress would be very useful."

## **7. What kind of community features would enhance your teaching experience?**

Mini Gopi, Dance Teacher: "A community forum where students can share their practice videos, get feedback from peers, and participate in dance challenges would be fantastic."

Aswin, Music Instrument Coach: "A space where students can post recordings of their performances and receive constructive criticism from both peers and instructors would be very valuable."

Aby George, Taekwondo Trainer: "Community challenges and events, where students can compete and showcase their skills, would greatly enhance motivation and engagement."

## **8. How important is it for you to have analytics and reporting tools on the platform?**

Mini Gopi, Dance Teacher: "It's very important. I need to track student progress and identify areas where they might need additional help or encouragement."

Aswin, Music Instrument Coach: "Analytics would help me understand which areas students are finding difficult, so I can adjust my teaching methods and provide more targeted support."

Aby George, Taekwondo Trainer: "Essential. Detailed reports on attendance, progress, and performance would help me manage my classes more effectively and ensure every student is progressing well."

## **9. What type of certifications do you currently offer, and how are they managed?**

Mini Gopi, Dance Teacher: "I issue paper certificates at the end of each course. Moving to an automated digital certification system would make this process much simpler and more professional."





Aswin, Music Instrument Coach: "Certificates are currently issued manually after assessments. Automating this process on the platform would save a lot of time and reduce errors."

Aby George, Taekwondo Trainer: "I provide paper certificates upon course completion. An online system for issuing and tracking certificates would streamline this and make it easier for students to access their achievements."

#### **10. How do you envision the equipment rental/purchase feature working on the platform?**

Mini Gopi, Dance Teacher: "Students should be able to browse a catalog of dance accessories, see prices, and either rent or buy items directly from the platform."

Aswin, Music Instrument Coach: "A well-organized catalog with detailed descriptions and reviews of instruments, along with easy options to rent or purchase, would be ideal."

Aby George, Taekwondo Trainer: "A marketplace with clear images and descriptions of training gear, where students can easily rent or buy what they need, would be very helpful."

#### **11. How would you like the platform to handle event notifications?**

Mini Gopi, Dance Teacher: "Students should receive notifications about upcoming classes and events on their dashboard and via email or push notifications."

Aswin, Music Instrument Coach: "Integration with a calendar and automatic reminders for upcoming sessions and events would ensure students never miss anything important."

Aby George, Taekwondo Trainer: "Push notifications and email reminders for upcoming classes, competitions, and events would keep everyone informed and prepared."







