# Software Requirements Specification for Software Engineering: subtitle describing software

Team 8 – Rhythm Rangers

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# Revision History

| Date | Version | Notes |
|---|---|---|
| Date 1 | 1.0 | Notes |
| Date 2 | 1.1 | Notes |

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# Appendix — Reflection

The information in this section will be used to evaluate the team members on the graduate attribute of Lifelong Learning. Please answer the following questions:

1. What knowledge and skills will the team collectively need to acquire to successfully complete this capstone project? Examples of possible knowledge to acquire include domain specific knowledge from the domain of your application, or software engineering knowledge, mechatronics knowledge or computer science knowledge. Skills may be related to technology, or writing, or presentation, or team management, etc. You should look to identify at least one item for each team member.

2. For each of the knowledge areas and skills identified in the previous question, what are at least two approaches to acquiring the knowledge or mastering the skill? Of the identified approaches, which will each team member pursue, and why did they make this choice?

   **Music Analysis and Signal Processing:** To acquire knowledge and skills in Music Analysis and Signal Processing, we can take online courses focused on audio signal processing and machine learning for music, building a solid theoretical foundation. We can also engage in discussions with university professors knowledgeable in this field. Additionally, we will take a look into analyzing audio data and implementing models using libraries like Librosa.

   **Frontend or Backend Development:** For knowledge and skills in Frontend or Backend Development, we will look at documentation for backend frameworks like Django or Flask to learn how to build and manage the recommendation system. We will collaborate with teammates to share knowledge and enhance our skills.

   **UI/UX and Design:** To acquire knowledge and skills in UI/UX and Design, we can read books and articles on UI/UX best practices to deepen our understanding of design principles. We can conduct user testing sessions with prototypes to gather feedback and iterate on the design.

**Music Generation and AI:** To acquire knowledge and skills in Music Generation and AI, we can will read research papers on generative models in music to understand their applications. Using Python libraries, we can test various algorithms to gain practical experience.

**Team Management and Infrastructure:** For Team Management and Infrastructure, the team will read books and articles on effective team leadership and management strategies, allowing us to understand different team dynamics and communication styles. We will also draw on our past experiences with team managers from co-op terms. Additionally, studying documentation on local server management and security best practices will help to establish a strong foundation for the project's infrastructure.