

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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5 Relevant Facts And Assumptions

5.1 Relevant Facts

- Existing music recommendation algorithms are limited in customization and accuracy
- Current generative models struggle to match the quality of human-produced music
- The output of current generative models is unpredictable
- Existing audio analysis tools provide a strong foundation that can be expanded upon
- The system will rely on external APIs to gather data on musical features
-

5.2 Business Rules

Not Applicable

5.3 Assumptions

- Users will have at least some familiarity of music theory
- The analysis and recommendation systems will use as many well-established musical features as possible

- All API inputs will be easily accessible and reliable enough to support the recommendation and analysis systems
- The system will be written in a language that all developers are familiar with
- The system will use a local server to handle the processing of the machine learning model and large datasets
- Handling of niche features and cover art are designed to enhance the user experience, but these will not be a part of the core functionality of the system
- The generative system will be completed by the POC demo date
- The recommendation and analysis systems will be completed by the Revision 0 date

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6.1 The Current Situation

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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?