Software Requirements Specification for Software Engineering: subtitle describing software

Team 8 – Rhythm Rangers

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Contents

Revision History

Date	Version	Notes
Date 1	1.0	Notes
Date 2	1.1	Notes

1 Purpose of the Project

1.1 User Business

Insert your content here.

1.2 Goals of the Project

Insert your content here.

2 Stakeholders

2.1 Client

Insert your content here.

2.2 Customer

Insert your content here.

2.3 Other Stakeholders

Insert your content here.

2.4 Hands-On Users of the Project

Insert your content here.

2.5 Personas

Insert your content here.

2.6 Priorities Assigned to Users

Insert your content here.

2.7 User Participation

Insert your content here.

2.8 Maintenance Users and Service Technicians

Insert your content here.

3 Mandated Constraints

3.1 Solution Constraints

Insert your content here.

3.2 Implementation Environment of the Current System

Insert your content here.

3.3 Partner or Collaborative Applications

Insert your content here.

3.4 Off-the-Shelf Software

Insert your content here.

3.5 Anticipated Workplace Environment

Insert your content here.

3.6 Schedule Constraints

Insert your content here.

3.7 Budget Constraints

Insert your content here.

3.8 Enterprise Constraints

Insert your content here.

4 Naming Conventions and Terminology

4.1 Glossary of All Terms, Including Acronyms, Used by Stakeholders involved in the Project

Insert your content here.

5 Relevant Facts And Assumptions

5.1 Relevant Facts

Insert your content here.

5.2 Business Rules

Insert your content here.

5.3 Assumptions

Insert your content here.

6 The Scope of the Work

6.1 The Current Situation

Insert your content here.

6.2 The Context of the Work

Insert your content here.

6.3 Work Partitioning

Insert your content here.

6.4 Specifying a Business Use Case (BUC)

Insert your content here.

7 Business Data Model and Data Dictionary

7.1 Business Data Model

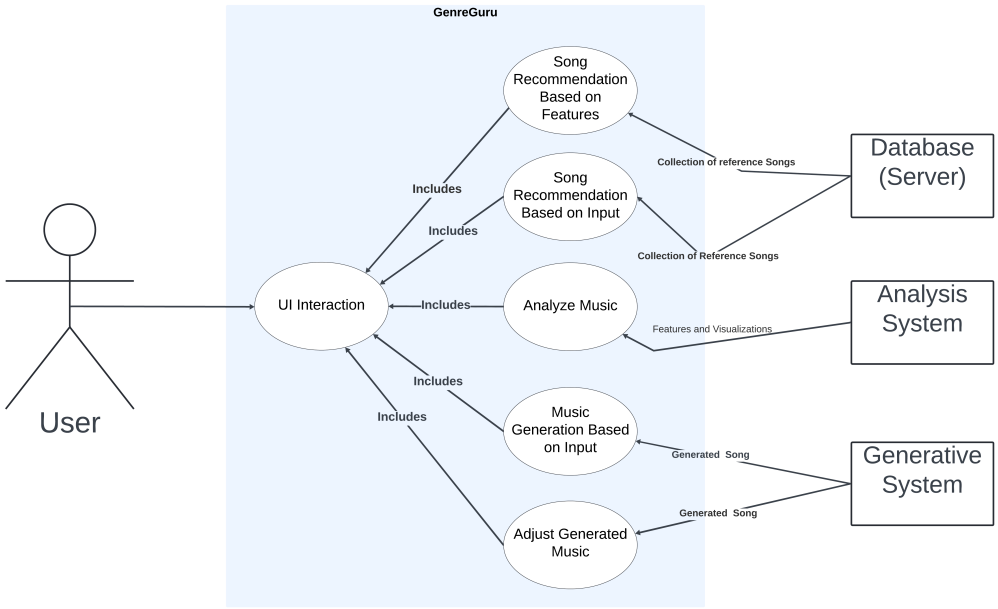
Insert your content here.

7.2 Data Dictionary

Insert your content here.

8 The Scope of the Product

8.1 Product Boundary

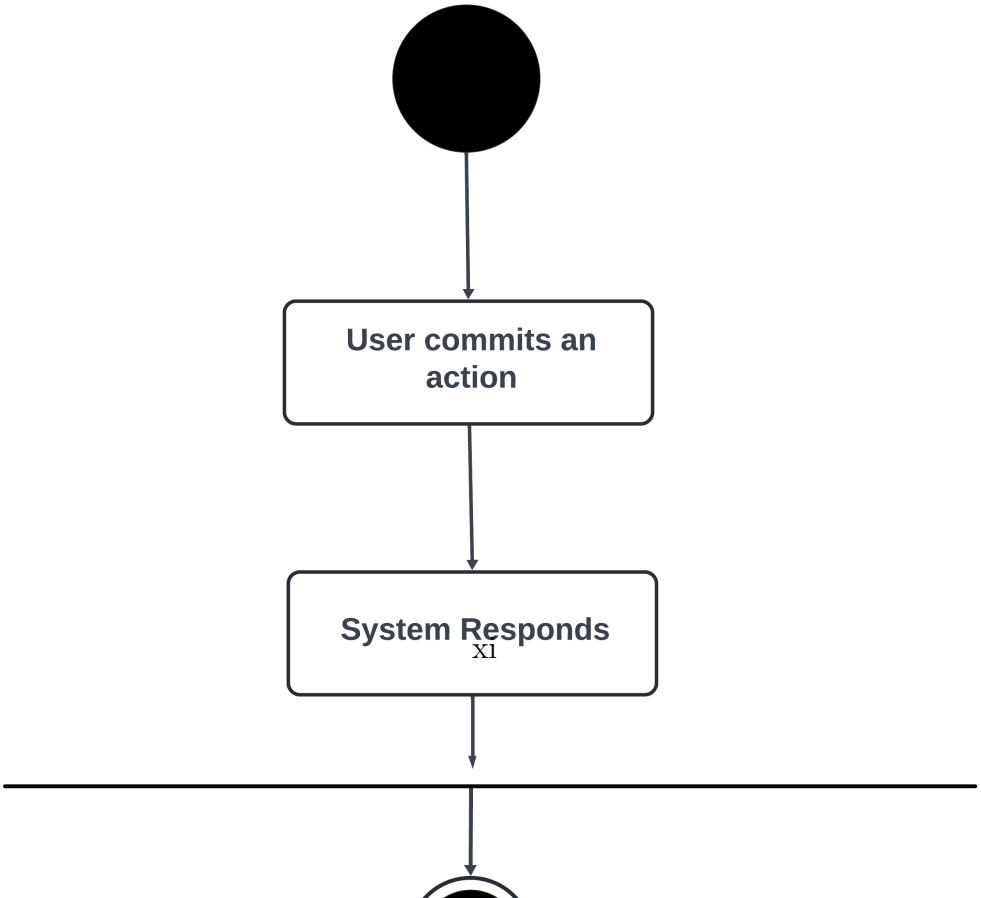


8.2 Product Use Case Table

8.3 Individual Product Use Cases (PUC's)

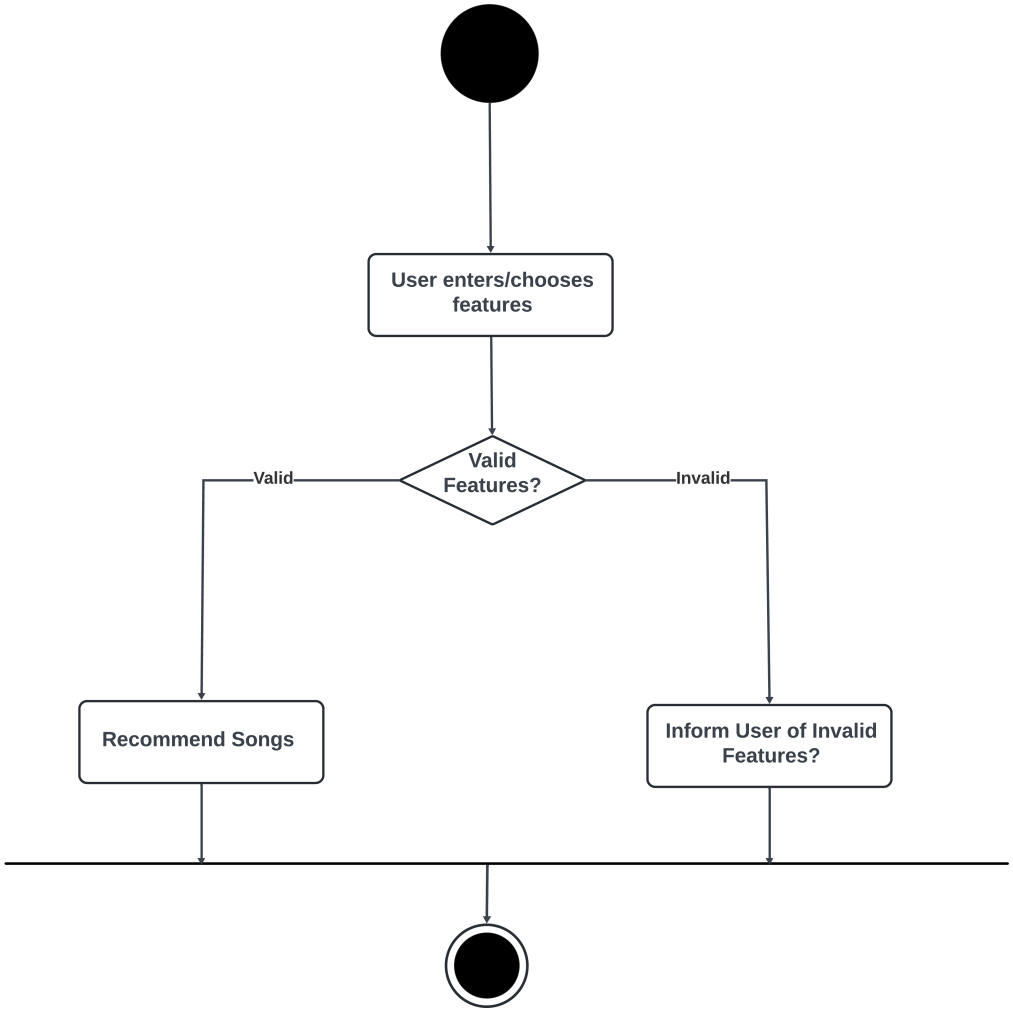
1. Product Use Case Name: UI Interaction
Trigger: User commits some action (e.g. clicking, swiping, dragging)
Preconditions: User has successfully accessed GenreGuru, or is already in GenreGuru
Interested Stakeholders: All
Actor/s: User
Activity Diagram:

PUC No	PUC Name	Act
1 System Response (out)	UI Interaction	User
2 collection of references songs (out)	Song Recommendation Based on Features	User
3 generated song or song snippet (out)	Music Generation based on Input	User
4 Collection of features and visualizations (out)	Analyze Music	User
5 collection of references songs (out)	Song Recommendation Based on Input	User



Outcome: The user will commit an action like swiping or pressing and the system will react depending on the action.

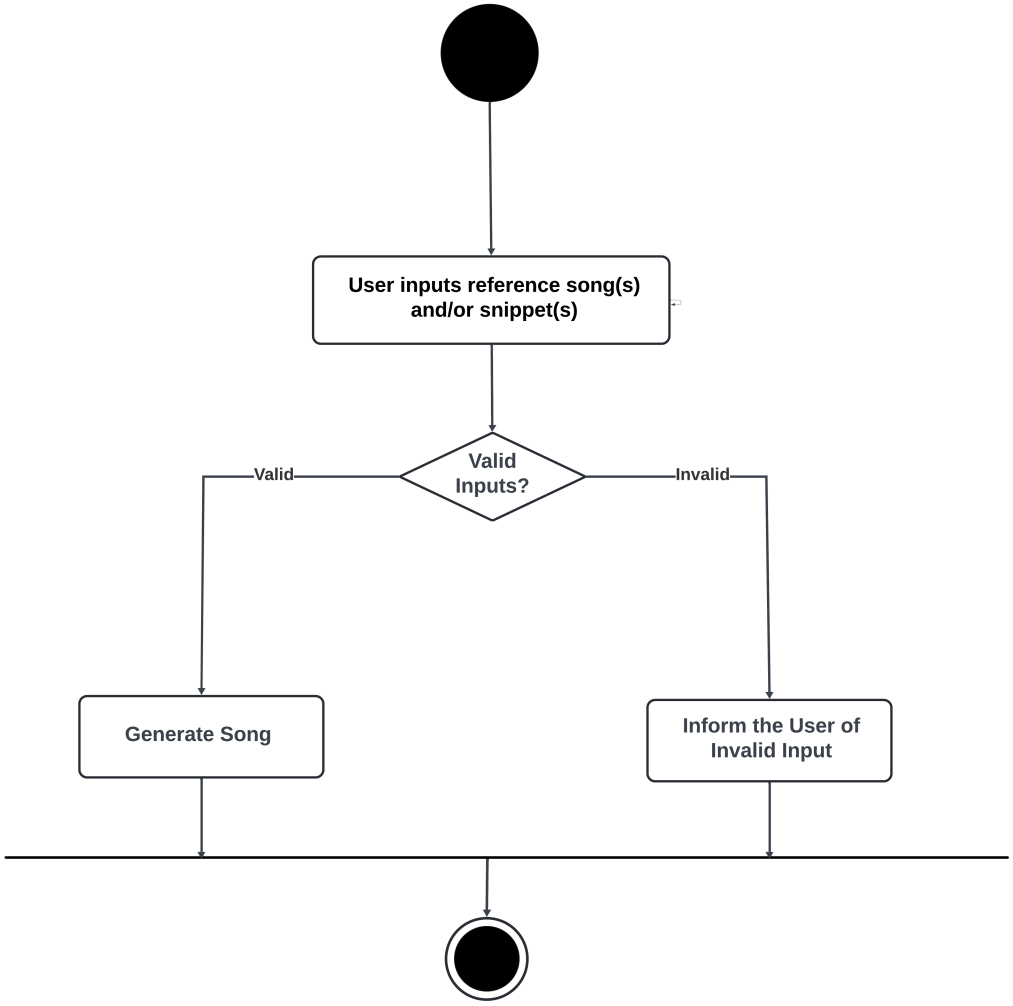
2. Product Use Case Name: Song Recommendation Based on Features
Trigger: User picks features, and indicates they want to search for recommendations
Preconditions: User must have GenreGuru open, the user has selected features to search for
Interested Stakeholders: Casual Music Listeners, Hobbyist Musicians
Actor/s: User
Activity Diagram:



Outcome: The user will select or manually enter features they are looking for in a song, and the system will first check to see if the features they selected/entered are valid, and the system will return a collection of reference songs that match those features.

3. Product Use Case Name: Music Generation Based on Input
Trigger: User inputs reference song(s) and/or song snippet(s), and indicates

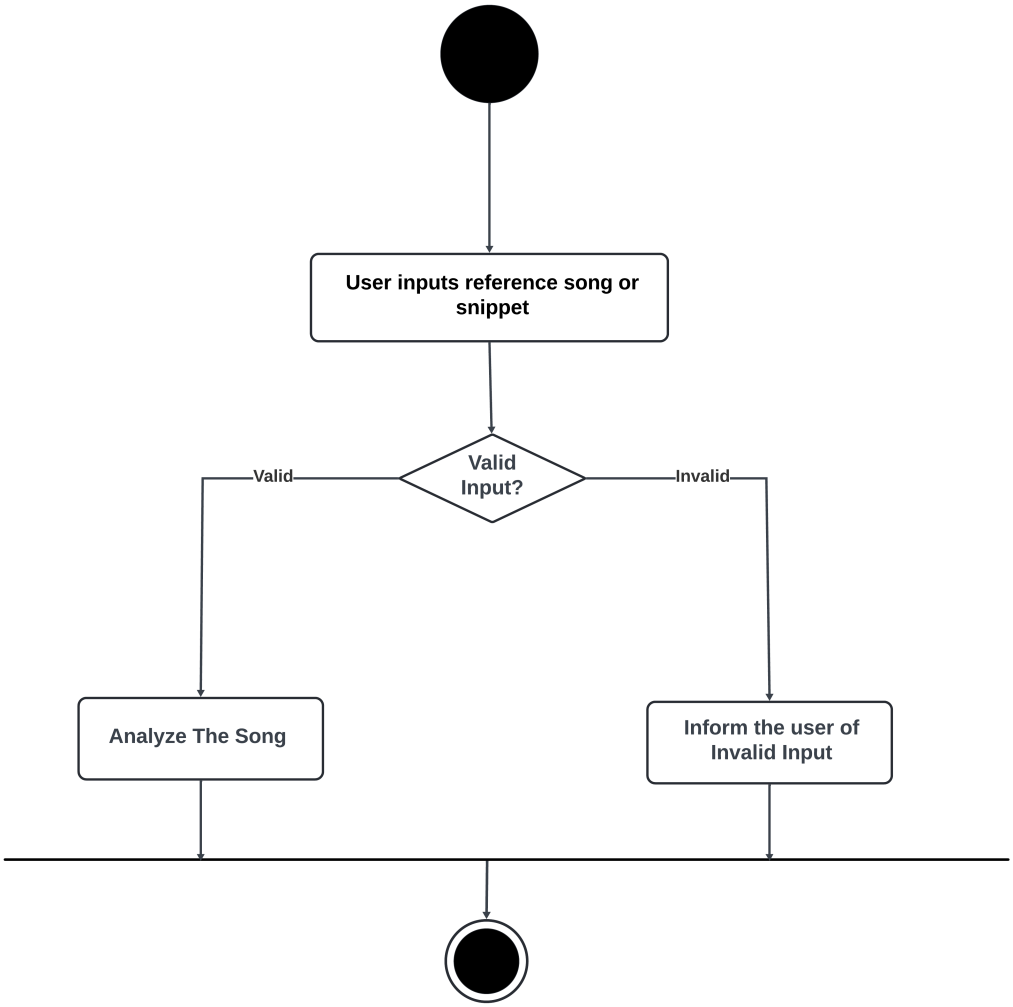
they want to generate a song
Preconditions: User must have GenreGuru open, and the user has provided a valid input(s)
Interested Stakeholders: Music producers, Hobbyist Musicians
Actor/s: User
Activity Diagram:



Outcome: The user will enter song(s) and/or song snippet(s) and indicate to the system that they want to generate music, the system will check that these inputs are valid (correct format) and then will generate a song and

return it to the user.

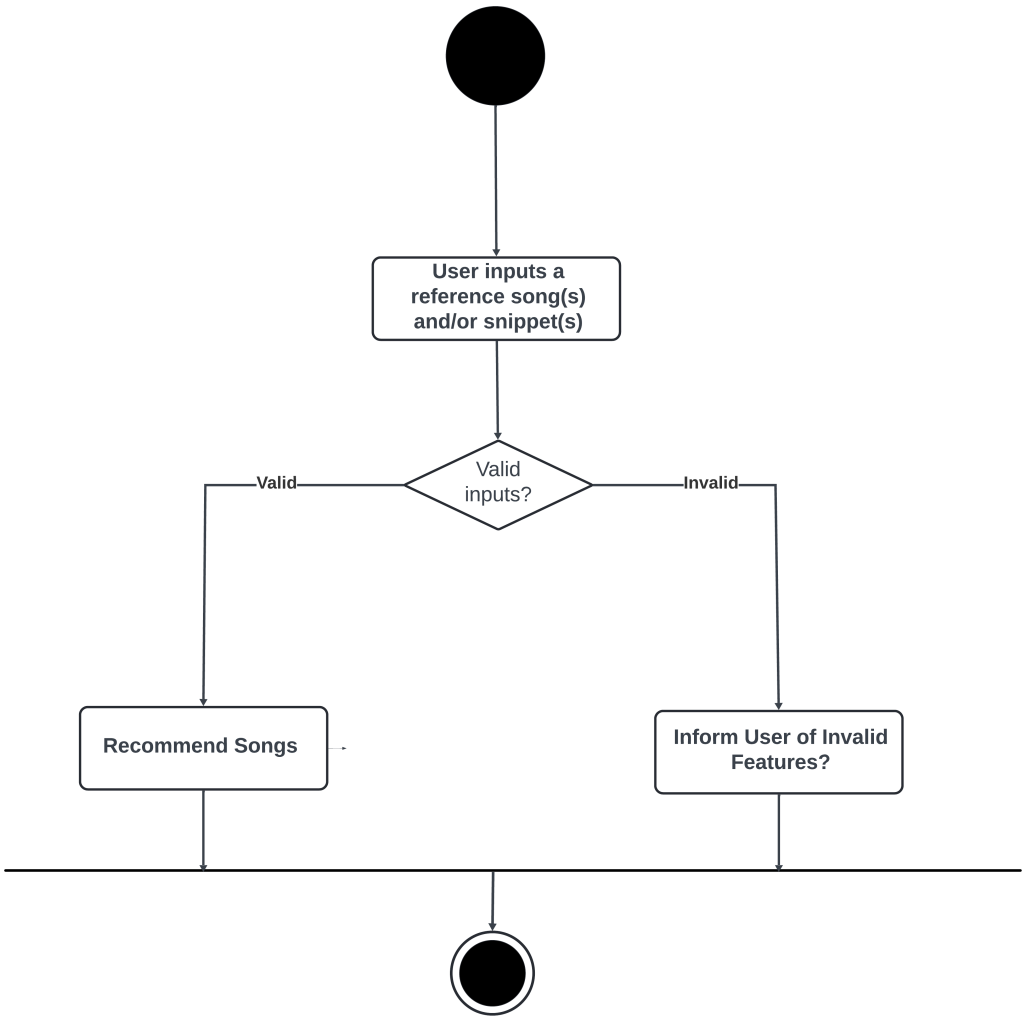
4. Product Use Case Name: Analyze Music
Trigger: User inputs a reference song or song snippet and indicates they want to analyze the music
Preconditions: User must have GenreGuru open, and the user has provided a valid input
Interested Stakeholders: Music Producers, Audio Engineers, Music Educators
Actor/s: User
Activity Diagram:



Outcome: The user will input a reference song or song snippet and indicate they want to analyze the song, the system will validate the input and return a set of features and visualizations.

5. Product Use Case Name: Song Recommendation Based on Input
Trigger: User inputs reference song(s) and/or snippet(s), and indicates they want to search for recommendations

Preconditions: User must have GenreGuru open, and the user has provided a valid input(s)
Interested Stakeholders: Casual Music Listeners, Hobbyist Musicians
Actor/s: User
Activity Diagram:



Outcome: The users will input reference song(s) and/or snippet(s), the system will first check to see if the inputs are valid. Then the system will

return a collection of reference songs.

9 Functional Requirements

9.1 Functional Requirements

Insert your content here.

10 Look and Feel Requirements

10.1 Appearance Requirements

Insert your content here.

10.2 Style Requirements

Insert your content here.

11 Usability and Humanity Requirements

11.1 Ease of Use Requirements

Insert your content here.

11.2 Personalization and Internationalization Requirements

Insert your content here.

11.3 Learning Requirements

Insert your content here.

11.4 Understandability and Politeness Requirements

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11.5 Accessibility Requirements

Insert your content here.

12 Performance Requirements

12.1 Speed and Latency Requirements

Insert your content here.

12.2 Safety-Critical Requirements

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12.3 Precision or Accuracy Requirements

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12.4 Robustness or Fault-Tolerance Requirements

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12.5 Capacity Requirements

Insert your content here.

12.6 Scalability or Extensibility Requirements

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12.7 Longevity Requirements

Insert your content here.

13 Operational and Environmental Requirements

13.1 Expected Physical Environment

Insert your content here.

13.2 Wider Environment Requirements

Insert your content here.

13.3 Requirements for Interfacing with Adjacent Systems

Insert your content here.

13.4 Productization Requirements

Insert your content here.

13.5 Release Requirements

Insert your content here.

14 Maintainability and Support Requirements

14.1 Maintenance Requirements

Insert your content here.

14.2 Supportability Requirements

Insert your content here.

14.3 Adaptability Requirements

Insert your content here.

15 Security Requirements

15.1 Access Requirements

Insert your content here.

15.2 Integrity Requirements

Insert your content here.

15.3 Privacy Requirements

Insert your content here.

15.4 Audit Requirements

Insert your content here.

15.5 Immunity Requirements

Insert your content here.

16 Cultural Requirements

16.1 Cultural Requirements

Insert your content here.

17 Compliance Requirements

17.1 Legal Requirements

Insert your content here.

17.2 Standards Compliance Requirements

Insert your content here.

18 Open Issues

Insert your content here.

19 Off-the-Shelf Solutions

19.1 Ready-Made Products

Insert your content here.

19.2 Reusable Components

Insert your content here.

19.3 Products That Can Be Copied

Insert your content here.

20 New Problems

20.1 Effects on the Current Environment

Insert your content here.

20.2 Effects on the Installed Systems

Insert your content here.

20.3 Potential User Problems

Insert your content here.

20.4 Limitations in the Anticipated Implementation Environment That May Inhibit the New Product

Insert your content here.

20.5 Follow-Up Problems

Insert your content here.

21 Tasks

21.1 Project Planning

Insert your content here.

21.2 Planning of the Development Phases

Insert your content here.

22 Migration to the New Product

22.1 Requirements for Migration to the New Product

Insert your content here.

22.2 Data That Has to be Modified or Translated for the New System

Insert your content here.

23 Costs

Insert your content here.

24 User Documentation and Training

24.1 User Documentation Requirements

Insert your content here.

24.2 Training Requirements

Insert your content here.

25 Waiting Room

Insert your content here.

26 Ideas for Solution

Insert your content here.

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?