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| MUSIC-LIBRARY-WEB-APP | | |
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| RISK ASSESSMENT | | |

# Overview

This Risk Assessment was used to identify potential risks for this project, plan appropriate actions to reduce these risks and mitigate them. This Risk Assessment was carried out during 3 phases of the project to see how the risks evolved through its lifecycle and maintain a good level of risk mitigation throughout its span.

The purpose of this Risk assessment is to:

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|  | 1. Identify all potential risks |
|  | 1. Analyze these risks for appropriate risk mitigation actions |
|  | 1. Tackle and prevent these risks using the actions adopted |
|  | 1. Repeat the analysis of these risks throughout the lifecycle of the project |

The key used to measure the likelihood, impact and risk rating of identified risks for this project:

Likelihood

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rare | Unlikely | Possible | Likely | Certain |
| 1 | 2 | 3 | 4 | 5 |

Impact

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Negligible | Minor | Moderate | Major | Fatal |
| 1 | 2 | 3 | 4 | 5 |

Risk Rating

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Very Low | Low | Moderate | High | Very High |
| 1-5 | 6-10 | 11-15 | 16-20 | 21-25 |

# Risk Register I – Carried out at Start of Project

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Ref | Risk Description | Cause | Risk Event | Likelihood (1-5) | Impact (1-5) | Risk Rating | Action |
| 1 | Lack of Project Understanding | Not having a grasp on specs and purpose of assignment | Incorrectly completing assignment | 3 | 4 | 12 | Spend time understanding scope of the project and deliverables. |
| 2 | Lack of Time | Mismanagement of time | Not completing assignment on time | 3 | 4 | 12 | Split up smaller tasks that form to complete larger tasks into daily and weekly goals. |
| 3 | Motivation | Tiredness, burnout, complacency, and laziness. | Assignment is not completed to the best possible standard | 2 | 5 | 10 | Work on the assignment in a structured/ moderated way, taking breaks and remembering to enjoy it. |
| 4 | Worldwide Disruption | Wave 2 of COVID-19 outbreak | Another lockdown causing disruption to services, work and health | 4 | 1 | 4 | Ensure hygiene kept up with social distancing and prepare for working well remotely. |
| 5 | Technical issues | Technologies not working as they should be/ misuse of technologies | Delays and more issues needing resolving to complete assignment | 3 | 4 | 12 | Further research the technologies being used and their common problems in order to be prepared and tackle potential difficulties. |
| 6 | Full Stack Technology not fully grasped | Front end design and Back end functionality not to the standard required by specifications | Unsightly application, UI unclear and fetching/ integration problems with Spring and rest of code causing issues | 2 | 4 | 8 | Study JS, HTML, CSS, Spring and Java to a proficient level and understand how front-end technology will be paired with the backend to produce a full stack application. |
| 7 | Lack of Testing | Not enough and accurate testing of methods carried out for the application | Unreliable and/ or unusable final application | 3 | 5 | 15 | Learn best practices and methods for all aspects of testing required for this project and aim for 80% industry standard testing coverage. |
| 8 | Dysfunctional Team/ Poor Teamwork | Lack of communication and Team not cooperating well with each other | Overlap in work done and unfinished or missing components of project. | 2 | 5 | 10 | Dedicate time for Sprint reviews, stand-ups, retrospective to allow for effective communication and take care of one another’s wellbeing. |

# Risk Register II – Carried out at Midpoint of Project

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| Ref | Risk Description | Cause | Risk Event | Likelihood (1-5) | Impact (1-5) | Risk Rating | Action |
| 1 | Lack of Project Understanding | Not having a grasp on specs and purpose of assignment | Incorrectly completing assignment | 1 | 4 | 4 | Spend time understanding scope of the project and deliverables. |
| 2 | Lack of Time | Mismanagement of time | Not completing assignment on time | 2 | 4 | 8 | Split up smaller tasks that form to complete larger tasks into daily and weekly goals. – prioritise more important Tasks to complete first |
| 3 | Motivation | Tiredness, burnout, complacency, and laziness. | Assignment is not completed to the best possible standard | 3 | 4 | 12 | Work on the assignment in a structured/ moderated way, taking breaks and remembering to enjoy it. |
| 4 | Worldwide Disruption | Wave 2 of COVID-19 outbreak | Another lockdown causing disruption to services, work and health | 3 | 3 | 9 | Ensure Hygiene kept up with social distancing and preparedness for working well remotely. |
| 5 | Technical issues | Technologies not working as they should be/ misuse of technologies | Delays and more issues needing resolving to complete assignment | 3 | 4 | 12 | Further research the technologies being used and their common problems in order to be prepared and tackle potential difficulties. |
| 6 | Full Stack Technology not fully grasped | Front end design and Back end functionality not to the standard required by specifications | Unsightly application, UI unclear and fetching/ integration problems with Spring and rest of code causing issues | 2 | 4 | 8 | Fully Understand how the backend functionality can be used by the front end to carry out the CRUD functionality by the end user in the most user-friendly way. |
| 7 | Lack of Testing | Insufficient UI and non-functional testing | Unreliable and/ or unusable final application | 3 | 5 | 15 | Learn best practices for testing UI testing on Selenium using Cucumber/ Gherkin, revise non-functional testing with JMeter. |
| 8 | Dysfunctional Team/ Poor Teamwork | Lack of communication and Team not cooperating well with each other | Overlap in work done and unfinished or missing components of project. | 2 | 5 | 10 | Dedicate time for Sprint reviews, stand-ups, retrospective to allow for effective communication and take care of one another’s wellbeing. |

# Risk Register III – Carried out near End of Project

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| --- | --- | --- | --- | --- | --- | --- | --- |
| Ref | Risk Description | Cause | Risk Event | Likelihood (1-5) | Impact (1-5) | Risk Rating | Action |
| 1 | Lack of Project Understanding | Not having a grasp on specs and purpose of assignment | Incorrectly completing assignment | 1 | 4 | 4 | Spend time understanding scope of the project and deliverables. |
| 2 | Lack of Time | Mismanagement of time | Not completing assignment on time | 2 | 4 | 8 | Split up smaller tasks that form to complete larger tasks into daily and weekly goals. – prioritise more important Tasks to complete first |
| 3 | Motivation | Tiredness, burnout, complacency, and laziness. | Assignment is not completed to the best possible standard | 2 | 4 | 8 | Work on the assignment in a structured/ moderated way, taking breaks and remembering to enjoy it. |
| 4 | Worldwide Disruption | Wave 2 of COVID-19 outbreak | Another lockdown causing disruption to services, work and health | 5 | 1 | 5 | Ensure Hygiene kept up with social distancing and preparedness for working well remotely. |
| 5 | Technical issues | Technologies not working as they should be/ misuse of technologies | Delays and more issues needing resolving to complete assignment | 3 | 4 | 12 | Further research the technologies being used and their common problems in order to be prepared and tackle potential difficulties. |
| 6 | Full Stack Technology not fully grasped | Front end design and Back end functionality not to the standard required by specifications | Unsightly application, UI unclear and fetching/ integration problems with Spring and rest of code causing issues | 2 | 4 | 8 | Fully Understand how the backend functionality can be used by the front end to carry out the CRUD functionality by the end user in the most user-friendly way. |
| 7 | Lack of Testing | Insufficient UI and non-functional testing | Unreliable and/ or unusable final application | 3 | 5 | 15 | Learn best practices for testing UI testing on Selenium using Cucumber/ Gherkin, revise non-functional testing with JMeter. |
| 8 | Dysfunctional Team/ Poor Teamwork | Lack of communication and Team not cooperating well with each other | Overlap in work done and unfinished or missing components of project. | 2 | 5 | 10 | Dedicate time for Sprint reviews, stand-ups, retrospective to allow for effective communication and take care of one another’s wellbeing. |