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| Module Code: SOFT336SL | Module Name: Cross Platform Application Development in C++ | |
| Coursework Title: ……………………………… | | |
| Deadline Date: 7 January 2021 | | Member of staff responsible for coursework: Marius Varga |
| Programme: BSc (Hons) Software Engineering (4872) | | |
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# 1. Introduction

## 1.1 Brief

The project is to develop a media player application with cross platform capabilities. This will be a desktop application and will be developed for Windows, Linux, Mac, or any other computer operating software. The application task will be to allow the users to play videos and listen to audio in an easy manner. The application is developed using the Qt framework and makes use of C++ language to provide a quality cross platform application.

# 2. Project Objectives

To identify the project objectives, we first need to identify what the customers are expecting from a media player and the take the feasible ideas and implement it on the project in order to solve the customers problem and at the same time satisfy them with the product. In this project there are multiple objectives that I am hoping to achieve but at the end the main goal is to provide an easy to use but effective media player for the user.

# 3. Initial Scope

## 3.1 Functional requirements

* It should be a cross platform application
* The users should be able to play videos
* The users should be able to play audio
* The user should be able to skip the audio or video
* They should be able to pause and play the audio and videos
* The user should be able to control the volume of the audio and video

## 3.2 Non-functional requirements

* The application should be user friendly
* The application should not take a large amount of memory to function
* The application should allow users to enter full screen

## 3.3 Initial Project Scope

1. Identify the functionalities that a media player contains
2. Identify the functionalities that are required by users
3. Create an initial design for the application
4. The proposed system will allow:
5. Users to watch videos from any folder in their computer
6. Users to listen to audio from any folder in their computer
7. Users to pause and play videos and audios
8. Allows users to reduce and increase volume
9. Allow users to skip forward and backward in their audio or video
10. The application will be a desktop application and will be cross platform application.

# 4. Initial Risk List

In every project there are risk, some of the risk may be internal and some may be external, but it is important to manage these risks because when the risk occurs, we know exactly what to do and how to do it. If there is no proper risk management, there is a high chance that the project might even fail. These are the risk for this project and how they should be managed alone with the chance of each risk occurring:

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| **Risk Plan** | | |
| **Risk** | **Probability of Occurrence** | **Management Strategy** |
| Schedule Overrun | High | To ensure that my schedule isn’t overrun with work a clear plan is made on which part should be done and precautions are also planned if I miss a deadline of a particular part of the system. |
| Technical Difficulties | Moderate | To minimize the technical difficulties of a project a GitHub repository is kept so that even if the computer crashes or does not function the work done on the project would not be lost. |
| Scope creep | Moderate | To avoid scope creep a proper scope for the project is made and will be strictly followed to avoid scope creep. Any function that is not there in the scope would be added only when all the task in the scope is done and has more time to spare. |
| User Acceptance | Low | A substantial amount of research was done on the area of the project to identify what the user like and what they want to ensure that the user accepts the application. |

# 5. Initial Quality Plan

In any given project quality is something that should be maintained through the process of the project and within the product itself. When a customer uses a product one of the key things that they check for is the quality of the product so not having a good quality product may even cause the entire project to fail. So quality is one of the key things that should be managed in a product. So, during this project the following quality checks where done to maintain quality and to make this project a success.

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| **Quality Plans** | |
| **Quality Check** | **Management Strategy** |
| Major deliverables | To ensure that the main requirements are met a plan was made in the planning stage on the work process to ensure that the main requirements are not rushed, and they maintain quality. |
| Quality control activities | During the project quality control activities will be done to ensure that a quality standard is maintained. One activity that will be done is getting user reviews on the application |
| Feasibility study | A feasibility study was done to ensure what is planned could be done within the time and with the resources available. |

# 6. Designs

## 6.1 Low level designs of the project

## 6.2 Screenshots of the system

# 7. Technical Documentation

## 7.1 Installation

## 7.2 Additional details

# 8. User Documentation

# 9. Testing

# 10. References