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| **Name:** | Jack Glantz |
| **Student access ID** | ED2638 |
| **Project Name:** | EZ Audio |
| **Group#** | 3 |

Lab Assignment 2

***Review the example below highlighted in yellow and populate all the other tables according to the Lab Assignment and this example. All requirements and fields must be populated to get full credit.***

***Example:***

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| **ID. Requirement title (e.g. FR1. Game initialization)** | | |
| Goal: FR1 provides the initialization of the game | | |
| Description:  There shall be two dice in the game. Each dice shall have six faces. The player’s movement shall be based on the dice roll. If the dice roll is two, the player shall move forward two cells; if the dice roll is three, the player shall move forward with three cells. | | |
| Origin: Initial product description. | | |
| Version: 1.0 | Date: MM/DD/YYYY | Priority: range from 1 to 5 (5 as the highest) |

**Functional Requirements:**

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| **FR1. Graphical User Interface** | | |
| The user shall interact with EZ Audio from a graphical interface | | |
| The application shall have a graphical interface by which the user interacts with the application | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 5 |

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| **FR2. Avoidance of sudden performance issues** | | |
| Keep the user from having their computer’s performance disrupted | | |
| Users will not experience freezes, hangups, or noticeable lag on their system as a result of booting up the application, downloading a video, or transcoding audio. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 3 |

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| **FR3. Clarity of interface options** | | |
| Prevent user confusion in using software | | |
| The application’s options, settings, and features will be labeled to make clear to the user what each option and function does. No interface elements will lack labels or explanations as to their function. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 3 |

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| **FR4. UX focus on inputs and outputs** | | |
| Present to user the desired audio file, not the process that achieved it | | |
| The application shall ask the user for the desired inputs (YT URL) and outputs (where they’d like the file put). The process of downloading the file, transcoding the audio, and other such intermediate steps will not be presented to the user. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 2 |

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| **FR5. Removing files no longer needed** | | |
| Deleting video files after they’ve been transcoded | | |
| The application will download a video file from YouTube, transcode the video to audio, and then upload that audio. After this process is complete the downloaded video file should automatically be deleted from the user’s computer. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 2 |

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| **FR6. Uploading to cloud storage automatically** | | |
| Put the user’s audio file in their cloud storage | | |
| After the user’s desired video has been turned into an audio file, that audio file shall be automatically uploaded to a user’s desired cloud storage service. This uploading (aside from any logging in process) will be executed automatically . | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 4 |

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| **FR7. Obtaining and adding info of a video** | | |
| Obtain information about video and use it for the end file | | |
| When a user enters a YouTube URL, the title, date uploaded, and description of that video about the video at that URL shall be collected by the application to be added the final audio file’s metadata. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 5 |

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| **FR8. Notify user about invalid URLs** | | |
| Have contingencies for invalid URLs and give user notice | | |
| If a user enters a URL that is not a valid YouTube URL then the application will display an error message to the user. Downloading of videos from invalid URLs will not be attempted. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 5 |

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| **FR9. Transcoding options** | | |
| Give users ability to select options about their desired audio file | | |
| Users shall have the ability to select the bitrate and audio format (MP3, FLAC, etc) of their final audio files. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 3 |

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| **FR10. Visibility of software errors** | | |
| Do not leave users unaware if application cannot complete the desired function | | |
| If the application encounters a problem (during transcoding/uploading/etc.) then the user shall be presented with a message stating that an error has occurred. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority:4 |

**Non-functional Requirements**

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| **NFR1. Inclusion of software dependencies** | | |
| Include all software needed to provide functionality | | |
| The application bundle shall have all the required software components that are required for its operation . | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 4 |

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| **NFR2. No installation needed** | | |
| Do not require the user to install EZ Audio in order to use it | | |
| EZ Audio will run from an executable without needing to be installed. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 1 |

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| **NFR3. Storage of information** | | |
| Define scope of data stored from application’s use | | |
| The application shall keep a log of intermediate steps conducted such as converting files, logging into cloud services, etc. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 2 |

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| **NFR4. Minimal online functionality** | | |
| Do not conduct online activity not directly relevant to core functionality | | |
| The application will access the internet to gather video file and the associated information. Then the application will use the internet to upload the audio file to the internet. Otherwise, the application will not use the internet for any other reason. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 1 |

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| **NFR5. RAM usage** | | |
| Do not use excessive amounts of memory while application is idle | | |
| While the application is idle (not downloading or transcoding or uploading) no more than 800MB of RAM shall be used by the application on a Windows 10 computer. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 3 |

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| **NFR6. Compliance with TOS and licensing** | | |
| Avoid the software breaking terms of service or licensing | | |
| The software will abide by the terms of service/use set out by the following parties: YouTube, cloud services, downloading and conversion software. For all software used to build and run this application, that software’s licensing terms shall be upheld. | | |
| Origin: Jack Glantz | | |
| Version: 1.0 | Date: 9/17/19 | Priority: 1 |