Software Testing

Assignment 1

Software Testing



TunePal

Your company is developing, *TunePal,* a cross-platform music library and streaming service. The application is still in the early stages of development, and management would like to have tester involvement right through the software development lifecycle. Right now all that is available are some informal descriptions of the functionality. The team is planning on following a Waterfall Development methodology

**Note on Marking:** This assignment is marked out of 45 and worth 45% of your overall module grade. Please see the rubric on Brightspace for details of how marks are allocated for each of these areas.

# Development Planning

1. Draw up a plan describing how the testing team will be involved throughout the project cycle; make sure you list what documents / code / other inputs the testing team needs at each stage and describe what will be produced and why.

(10 marks)

# System Requirements

2. The following system requirements have been provided to you by the business analysis team. Make whatever adjustments are necessary to these requirements and use them to draw up a corresponding set of tests, in each case clearly labelling the test object and test basis.

(15 marks)

* Users will be able to create an account and log in
* Users will have access to a shared library of songs but can also add their own private collection
* The app should be finished by August
* The library should be searchable by artist, song title and year of release
* Users should be allowed to log in on up to 2 devices at a time
* Songs should take no longer than 5 seconds to download fully onto the user’s device
* Users should be able to access the shop to buy premium titles: this will allow them to fill a basket before going to the checkout to pay. At any stage the user may empty their basket by clicking a button

# Unit Testing

4. The system has been split into a front-end application and an API. The code for the tunepal API has been provided. Write a set of unit tests to test the functionality. Create a document outlining any defects you found and how you addressed them. Comment on how well covered your tests are. (20 marks)

**Note:** You may use YouTrack to record the System requirements and bugs discovered during unit testing if you wish. If you choose to do this, ensure that the *public* user has read-access to your repository and include a link to your repository in your document. *Repositories will be scraped and stored locally so please do not edit your repository after submission.*