Digital Technologies & Hangarau Matihiko 3.8A

Level 3, 6 Credits, Internal Assessment

Student Documentation

This document serves as evidence of your work for **AS 91901: Apply user experience methodologies to develop a design for a digital technologies outcome**

# Introduction/Kupu Arataki

This assessment activity requires you to plan, develop and create a complex computer program.

You will be assessed on

* How effectively you use project management tools and techniques to plan and manage the development of a digital outcome
* How effectively you decompose the problem into smaller components, and test and refine your media outcome so that it is a high-quality response to the task
* How well you have addressed relevant implications
* How well you synthesise information from the planning, testing and trialling of components to develop a high-quality response to the task (e.g. well-structured, logical, flexible, robust and comprehensively tested program)
* Discuss how this information assisted in the development of a high-quality outcome.

# Problem Statement

Recommender systems are commonly recognised as playlist generators for video and music services like Netflix, YouTube and Spotify, product recommenders for services such as Amazon, or content recommenders for social media platforms such as Facebook and Twitter.

“In October 2006, Netflix released a dataset containing 100 million anonymous movie ratings and challenged the data mining, machine learning and computer science communities to develop systems that could beat the accuracy of its recommendation system, Cinematch” (Bennett & Lanning, 2007).

Given a dataset of movies or music albums, users and their ratings, you are to create a recommender system.

## You must:

* Be able to add a movie or musical album (name, director/artist, genre)
* Search for a movie or musical album
* Rate a movie or musical album
* Recommend a movie or a musical album specific to the user based on their rating
* Have a GUI

You may possibly want to use persistent storage (i.e. store the data in a file)

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# S.W.O.T Analysis

Conduct a SWOT analysis for the project management tools you are considering using for your project.

## [Trello](https://trello.com/) for Project Management

#### Strength’s

* Easy to visualise tasks that: need to be done, currently being worked on or are completed
* Mobile app means its convenient to change and add tasks on the go
* Checklists within a card are very useful

#### Weakness’

* Trello requires payment in order to assign parent/child cards. This doesn’t work for our project
* Doesn’t handle big projects very well
* No Gantt charts
* Only simple descriptions can be given for tasks

#### Opportunities’

#### Threat’s (an aspect that prevents the tool from being useful)

* Being unable to create parent/child tasks is a pain in that you must create a full task for every decomposed task

## [ClickUp](https://clickup.com/) for Project Management

#### Strength’s

* Allows nested subtasks and checklists
* Organise projects using folders for better management
* Calendar view shows you how long you have to finish tasks in order to stay finish on time
* Allows you to upload media
* Software organises projects in an intuitive manner

#### Weakness’

* The amount of features can feel overwhelming
* Complicated interface that is not always easy to pick up and use

#### Threat’s (prevent the tool from being useful)

* Complicated interface could lead to wasting time figuring out how to use the software rather than managing the project

## [Monday](https://monday.com/lp/projectmanagement/bundle/?marketing_source=adwordssearch&marketing_campaign=au-s-project_management-b-desk-monday&aw_keyword=%2Bproject%20%2Bmanagement%20%2Bplatforms&aw_match_type=b&cluster=project_management&subcluster=&gclid=Cj0KCQjwsZKJBhC0ARIsAJ96n3VWqhG2mPzFpywfo87hxyw3RfYef8KTnuYyFcr5z08O4gp8nRTAgU8aAv53EALw_wcB) for Project Management

#### Strength’s

* Works well as a visual management aid
* Shows the status of projects
* Customisable project management styles such as Kaban, Gantt chart

#### Weakness’

* There is a steep learning curve when coming to using Monday to aid in managing your project
* Relies heavily on having good organisational skills
* Page response time is lacking when boards have many tasks

#### Threat’s (prevent the tool from being useful)

* Complicated interface could lead to wasting time figuring out how to use the software rather than managing the project

# Decomposing the Outcome

Decompose your digital technologies outcome into smaller components. User stories is one method that is commonly used in an A.G.I.L.E methodology

**Graphical user interface, text, application, website

Description automatically generated**

# Explain relevant implications

What relevant implications do you need to consider in the design of your digital technologies outcome? Explain at least three relevant implications and how they relate to your project.

## Intellectual property

One of the relevant implications I will need to take into consideration while developing my digital outcome is Intellectual Property. According to [Wikipedia](https://en.wikipedia.org/wiki/Intellectual_property), “Intellectual property is a category of property that includes intangible creations of the human intellect.” Every kind of content has some sort of intellectual property associated with it. Take a musical album for example, the album will have a cover image will most likely be owned by the label.

While developing this outcome I must make sure to not infringe on anyone’s intellectual property. This does not necessarily mean I am unable to use other people's creations however, if I am to do so I will make sure that I accredit them in an appropriate manner.  If I did not take this into consideration, I could be facing legal concerns later down the track to do with copyright and or other legal infringements.

Throughout this project I have made sure to follow this relevant implication by accrediting functions that have been inspired by someone else’s code, such as

## Functionality

Another thing I need to take into consideration while developing my game is the functionality of it. According to the Cambridge Dictionary functionality is the “quality of being useful, practical, and right for the purpose for which something was made”. The functionality of my outcome is especially important, if the outcome were no to function properly, nobody would be able to use it, thus making it useless.

As for the outcome I will be developing, I must make sure that the user is able to navigate through all of the menus and different screens with ease so as to not ruin the experience. One of the ways I can make my outcome more functional is by drawing the outputs to the GUI for the user to visually see as opposed to printing them in the console.

Throughout the development of my outcome I have made sure to follow this functionality implication by following the technique I described above. Notably the function for printing out the game's details is encased between two dashed lines. This is so that it does not feel like the user if being bombarded with information as it sometimes does playing text based games.

## Sustainability and Future Proofing

conduct usability testing with potential uses of the site, such as past, present and/or future Onslow Students as well as any other potential end user. This will allow me to improve the site and fix any usability issues that I may have missed or overlooked

# Sprint Tracking 1

|  |  |  |
| --- | --- | --- |
| Sprint Number: | Start Date: | End Date: |
| Number 1 | 26th August |  |

## Planning:

During the first sprint I am going to focus on developing the Content class. The Content class will be an object that contains 5 key fields: an ID, Name, Creator, Genre and Rating. Getter and Setter methods will also be included in the class as required.

## 

## Development

The components of this class I will be trailing include:

* Setting up the Constructor – in order to create a Content obj
* Testing that the Getter and Setter methods all return the correct values

Provide evidence of your version control (GitHub)

## Feedback

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

### Outcome of the feedback

What is the outcome of the feedback:

## Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Testing:** | **Values Entered:** | **Expected Result:** | **Result:** | **Comment:** |
| **Expected:**  function() | Clicking the “View All Cards” button in the GUI | All of the cards that have been added to the collection will print out in the GUI’s console along with their details |  | Works as expected |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |

## Evaluation

Sprint reflection and summary

What major changes and achievements did you complete in this sprint?

Provide evidence of your project management tools being used to manage the development of your outcome at the end of your sprint

# Sprint Tracking 2

|  |  |  |
| --- | --- | --- |
| Sprint Number: | Start Date: | End Date: |
|  |  |  |

## Planning:

What are you planning to work on in this sprint?

Provide evidence of your project management tools being used to plan the development of your outcome at the beginning of your spring here

## Development

What components are you going to trial:

* Something goes here

Provide evidence of your version control (GitHub)

## Feedback

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

### Outcome of the feedback

What is the outcome of the feedback:

## Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Testing:** | **Values Entered:** | **Expected Result:** | **Result:** | **Comment:** |
| **Expected:**  function() | Clicking the “View All Cards” button in the GUI | All of the cards that have been added to the collection will print out in the GUI’s console along with their details |  | Works as expected |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |

## Evaluation

Sprint reflection and summary

What major changes and achievements did you complete in this sprint?

Provide evidence of your project management tools being used to manage the development of your outcome at the end of your sprint

# Sprint Tracking 3

|  |  |  |
| --- | --- | --- |
| Sprint Number: | Start Date: | End Date: |
|  |  |  |

## Planning:

What are you planning to work on in this sprint?

Provide evidence of your project management tools being used to plan the development of your outcome at the beginning of your spring here

## Development

What components are you going to trial:

* Something goes here

Provide evidence of your version control (GitHub)

## Feedback

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Component:** |  | | |
| **Name:** |  | **Date:** |  |
| **Feedback:** |  | | |

### Outcome of the feedback

What is the outcome of the feedback:

## Testing

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Testing:** | **Values Entered:** | **Expected Result:** | **Result:** | **Comment:** |
| **Expected:**  function() | Clicking the “View All Cards” button in the GUI | All of the cards that have been added to the collection will print out in the GUI’s console along with their details |  | Works as expected |
| **Expected:**  function() |  |  |  |  |
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| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |
| **Expected:**  function() |  |  |  |  |

## Evaluation

Sprint reflection and summary

What major changes and achievements did you complete in this sprint?

Provide evidence of your project management tools being used to manage the development of your outcome at the end of your sprint

# Project Summary

## Addressing relevant implications

How did you address the relevant implications in the development of this outcome?

## Synthesising information gained from: Planning, Testing and Trailing of components

How did you use the tools, techniques and process of each sprint inform the development of this outcome?

## Discussing how this information lead to the development of a high-quality digital outcome

How did the process help to shape the development of your outcome? Provide evidence.