|  |  |
| --- | --- |
| IP3 Group Number: | 25 |
| Project Title: | Add Descriptive title |
| Date: |  |
| Group Member Names: | Basharat Afzal |
|  | Mark Cottrell |
|  | Merin Haslacher |
|  | Zarko Ivanov |
|  | Martin Abadzhiev |
|  |  |
| URL of Deployed Web Application: |  |

**Note: Report Naming**

Please rename this report to:

IP3\_GROUP\_REPORT\_2018-19\_GROUP\_XX.docx

Example: IP3\_GROUP\_REPORT\_2018-19\_GROUP\_03.docx

**Please use only this supplied template for your group report.** Use the MS Word Styles that are built-in – Heading 1, Heading 2, Heading 3.

**Note: Referencing**

Some example references are provided here, using the inbuilt referencing facilities in Microsoft word. Microsoft has a useful tutorial that you should follow [1].

As an example, the paragraph below has two web references and one book reference:   
The Python language [2] has increased in popularity according to PYPL [3]. One useful book for learning Python for manipulating datasets is *Python for Data Analysis* by Wes McKinney [4].

**References are expected for all external entities, technologies, etc. – apart from the most common ones.**

**Please remove all notes above!**

**Executive Summary**

[Note: Change this to reflect your project]

**Example**:

This report describes the process of creating a prototype software application to respond to the Integrated Project 3 module specification: “Creation of a Document Management System”.

The application has been designed and built by a group of five students over a period of ten weeks and meets all the core requirements listed in the project specification document. In addition to these requirements being met, the group has integrated into the prototype a ‘Live Reporter’ system that allows a user to easily highlight an inconsistency/problem at a specific location within a document and have this communicated quickly to other document management system users.

The software is written as a web application using Microsoft ASP.NET MVC. The system has been designed to be responsive and has been tested on a range of device form-factors including phones, tablets and larger screen devices.

Our testing and evaluation provides evidence that the project has been successful. This report describes the design, system architecture, implementation, testing and evaluation of the prototype.

This report describes the process of creating a website application to respond to the Integrated Project 3 module specification: “Integrated Project 3 (IP3) Project Specification January 2019”.

The application has been designed and built by a group of five students over a period of twelve weeks and meets all the core requirements listed in the project specification document. (anything extra we put in goes here)

The software was written as a web application using (not sure). The system has been designed to be responsive and has been tested on (need to test first).

The results of the testing and the evaluation of the system provides evidence that the project has been successful. This report describes the design, system architecture, implementation, testing and evaluation of the prototype.

[Note: Please ensure that you use the MS Word Heading Styles already present in this document. Use Right Click | Update Field | Update Entire table to refresh the Contents table below when you make any changes.]

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# Project Introduction

[Note: The quality and clarity of the *Introduction* is important. For any document, you should always have a clear introduction that relates the **purpose** of the document (in this case it is a final report that describes the lifecycle of the work) and the **subject** of the document (the product/design that is to be created).]

**Example**: [Change this to match your project.]

This report describes the process of creating a prototype software application for the Integrated Project 3 (IP3) module at GCU, in session 2017-18. The application is a ‘Document Management System’ that allows users to originate, version, store, distribute and archive a range of document types, in a variety of electronic formats. The Project Introduction section of the report describes the background to IP3 and an outline of the business requirements for the new software product that the team have developed. Subsequent sections cover the design and implementation of the product and some reflection on the project process.

The project specification is available online [REF].

The initial planning phase of the project led to the creation of a Project Initiation Document that is available online [REF].

## Integrated Project 3 Concept

Please reference the Project Initiation Document here and indicate where the reader can find an overview of the IP3 module concept.

## Project Overview

[Note: Change this to match your project.

Provide **a high-level overview** of the features of the software product, not the full specification. An important skill that you need to develop is how to describe a system at different levels of abstraction. So, you must not provide technical details in this description, just an overview description of **what** will be delivered.]

**Example**:

This section provides a high-level overview of the business requirements for the Document Management system. A detailed system specification is available online [x].

The system should allow staff to originate and access documents on a range of computing devices (ranging from phone devices to full-screen computing devices). In order to cover the widest set of devices without having individual software builds for different platforms, it has already been decided that the application should be web-based, utilising responsive design techniques.

The system must allow a range of existing document types to be made available to users and provide an interface that provides the following functionality:

* Importing of documents (with pre-defined document types) into the system
* Versioning of documents
* Reviewing of documents before they are released for use.
* Viewing of documents utilising integral viewer technology
* Viewing lists of current documents categorised in the following ways:
  + By Date
  + By Author
  + By document category
  + By Issuing-Department
* Viewing older version of documents
* Deleting documents
  + A ‘trash’ subsystem must be implemented that allows retrieval of deleted documents
* Reporting of issues with documents that need resolved.
* **etc…**

The system will include provision for the *roles* listed in Table 1.

[Note: Please use MS Word Captions such as the one used below for Table 1]

Table System Roles

|  |  |
| --- | --- |
| **Role** | **Responsibilities** |
| Administrator | Creating users and allocating roles  Deleting Users |
| Author | Can originate documents (‘owns’ these documents)  Has read/update/delete rights to ‘owned’ documents |
| Reviewer | Reviews and approves documents before they are released |
| Reader | Has read-only access to released documents |

An administrator can register *users* so that they can access the system (users are named individuals) and allocate one-or-more roles to each user. For example, Mary can be registered and can be both an Author and Reader.

<etc>

# Group Organisation and Roles

Provide an overview of how your group members have been organised throughout the project process.

* Define the purpose of the roles.
* List the roles taken by each group member.
* Explain how the actual roles adopted by group members have been updated since the roles listed in the Project Initiation Document.

# Design & Development Tools

## Design Tools Description and Justifications

Please reference the Project Initiation Document here and indicate where the Design Tools Description and Justifications can be found in that document.

### Subsection

This is heading 3 style, if you need further subsections beneath any ‘Heading 2’ sections

## Development Tools/Environments

Please 1. List, 2. describe and 3. justify the selection of the development environments (such as IDEs, code-editors), browsers, browser-tools, etc. that have been used throughout the development of the project.

# HCI Approaches

## General Aspects

Describe the general HCI concepts applied to you web application (navigation / colour / accessibility, etc.).

## Page Layouts

Describe and justify your page layouts and provide a few visual examples. Your full set of wireframes should be referenced from here and be placed in an appendix.

# Software Creation

[Note: In section 5.1 you will **list** **the technologies** used, **explain their purpose** and **justify their selection**. In section 5.2, you will **explain how you used these technologies** in the creation of your application.]

## Development Technologies

Please list the technologies used, explain their purpose and justify their selection.

These descriptions should be clearly labelled and separated within the narrative. Tables or subsections can be used (as appropriate) to provide clear separation of descriptions. Please include diagrams as required.

Recap:

* List each technology / language / framework / library / API that is used
* Explain the purpose of each technology
* Justify the selection of each technology

If you investigated technology alternatives before finally selecting, then you can discuss this here as well.

### Subsection

This is heading 3 style, if you need further subsections beneath any ‘Heading 2’ sections

## Developing the Application

Explain your approach to developing the application using these technologies. As part of the IP3 challenge, it is left to the group to decide what to include in this section; there is no predefined template that is expected. You **should** include a description of your approaches to unit-testing the code. [Note: you **do not** need to have deep technical discussion of how the libraries and APIs are used since the web application has tutorial pages that describe these aspects.]

Explain how you have met the following requirement (from the specification): “*The application must be well-structured (separation of code and content) and make use of structured styling techniques. “*

[Note: See the following article: “Separate Design, Code, Content”. <https://designmanagementlucerne.wordpress.com/web-basics/design-code-content/> ]

# Functional Testing

You should reference the later section of the report: *Appendix 3 Acceptance Tests* since it will contain a list of acceptance tests and the test outcomes. [**Note:** **The list of acceptance tests should originally have come from your group’s Project Initiation Document. It will probably have been expanded/refined as a result of developing the application.]**

# Review of Final Deliverable

Provide a review of each aspect of the final deliverable product and your view (with evidence) of whether you have delivered a satisfactory product.

# Conclusions

* Discuss the project process and describe which aspects went as expected and which didn’t.
* Explain what you would do differently if you had to undertake the project again.
* Provide three items of advice that you would pass on to students undertaking IP3 in the future.

# Appendix 1 – Product Screenshots

Provide a representative set of screenshots to illustrate the developed product.

# Appendix 2 – Design Wireframes

# OVER/

# Appendix 3 Acceptance Tests

## Manage Reports

**[Note: this is just an example. You can provide a similar table based on your specification. Your version will have significantly less detail than this example!]**

As the report manager, I want to manage my report forms so that I can manage and resolve issues reported within the company.

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Create a report form template | As a report manager I want to be able to create a reporting form template so that users can use it to submit issues identified to be investigated and closed  *Additional Information:*  *The intent is to be able to reproduce paper based forms that they may have had within the business and represent these in an electronic format.* | |  |  | | --- | --- | | * Create and design a form template | Part | | * Form template name | No | | * Add fields to form template | Yes | | * + Free text fields |  | | * + Date fields |  | | * + Person fields |  | | * + [optional] dropdown |  | | * + [optional] images |  | | * + [optional] checkbox group |  | | * + [optional] radio group |  | | * Fields added can be labelled |  | | * Default fields on report template will be: |  | | * + Report owner |  | | * + Report raiser (auto filled with name of logged on user) |  | | * + Submitted date (auto filled when submitted with today’s date) |  | | * + Details (a free text field) |  | | * [optional] Fields can be defined as mandatory (must have a value before it can be submitted) |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| View a report | As a report manager, I want to be able to view reports submitted allowing me to easily manage them | |  |  | | --- | --- | | * View filtered and complete list of reports |  | | * [optional] Sort the list of reports |  | | * [optional] Be able to search for a report by name |  | | * View a report record |  | | * Can view who submitted the report |  | | * Can view when date and time when report was submitted |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Edit a report | As a report manager, I want to be able to edit reports submitted so that I can investigate and update them | |  |  | | --- | --- | | * Assign a report owner |  | | * Can edit fields on report |  | | * Cannot change report submitted date |  | | * Cannot change name of person who submitted the report |  | | * Report owner can manually change the status to “Investigation” |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Close a report | As a report manager I require to be able to close submitted reports so that I can identify reports that are complete | |  |  | | --- | --- | | * [optional] Notify report raiser when the report is closed |  | | * Status of report is set to “Closed” |  | | * Insert a close date |  | | * Record is set to read only. Report Managers can reopen the report record to edit which will set the status to “Open” |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Delete a report | As a report manager I want to be able to delete reports so that I can remove reports entered in error preventing the system from being cluttered | |  |  | | --- | --- | | * Report is removed from the system |  | | * Confirmation dialog will be presented to the user to ensure that they want to delete |  | | * Ability to delete will be permission controlled |  | | |

## Raise Report

As a reporter, I want to be able to create and submit reports of issues identified within the company.

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Create a report | As a reporter I require to record details of the event to the report record before submitting | |  |  | | --- | --- | | * Creates a new report record with the status of “Draft” |  | | * Report raiser name is entered on the record |  | | * Can record text details of issue |  | | * Date issue occurred |  | | * Can record the severity of the issue |  | | * Can add attachments to the report |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Submit a report | As a reporter I want to be able to submit a report to the report managers for investigation | |  |  | | --- | --- | | * [optional] Notify the report manager(s) that the report has been submitted |  | | * Assigns a unique identifier to the report |  | | * Once submitted the report status is set to “Open” |  | | |

## User Management

As the reporting management system administrator, I require to be able to create user and manage user accounts and assign them permissions so that I can control who can perform what actions.

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Create user | As a system administrator, I require to be able to add users to the system | |  |  | | --- | --- | | * Can create a new user account: |  | | * + Add Forename (Mandatory) |  | | * + Add Surname (Mandatory) |  | | * + Add Email address (Unique, Mandatory) |  | | * + Add to a role(s) |  | | * Username (Unique, Mandatory) |  | | * Password |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Edit user | As a system administrator, I require to be able to edit users with the system | |  |  | | --- | --- | | * Can edit details of user account |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Archive user | As a system administrator, I require to be able to archive people who are no longer users of the system | |  |  | | --- | --- | | * Can archive user account |  | | * User cannot be archived where they are named on a report that is not “Closed” |  | | * [optional] Where user name appears on reports created the name will be highlighted as archived |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Create role | As a system administrator, I want to assign security to a role so that members of this role will inherit the security permissions | |  |  | | --- | --- | | * Can create a role |  | | * + Role name |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Edit role | As a system administrator, I want to be able to edit security applied to a role so that I can manage and update security permissions applied to the role | |  |  | | --- | --- | | * Can edit role name |  | | * Can assign/remove permissions to the role: |  | | * + Create report form template |  | | * + Create and submit a report record |  | | * + Delete report record |  | | * + Edit report record details |  | | * + Add attachment |  | | * + Remove attachment |  | | * + Close report |  | | * + Change status of report |  | | * + Reopen report |  | | * Can add users to the role |  | | * Can remove users from the role |  | | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **User Story** | **Acceptance** | **Tested and working (Yes/No/Part)** |
| Delete role | As a system administrator, I want to delete a role allowing me to be able to remove roles no longer required | |  |  | | --- | --- | | * Can delete role. Role can only be deleted where no users are assigned to it |  | | |

# References

|  |  |
| --- | --- |
| [1] | “Create a bibliography, citations, and references,” [Online]. Available: https://support.office.com/en-us/article/create-a-bibliography-citations-and-references-17686589-4824-4940-9c69-342c289fa2a5. [Accessed 7 3 2019]. |
| [2] | “Python,” [Online]. Available: https://www.python.org/. [Accessed 9 3 2019]. |
| [3] | “PYPL PopularitY of Programming Language,” [Online]. Available: https://pypl.github.io/PYPL.html. [Accessed 5 3 2019]. |
| [4] | W. McKinney, Python for Data Analysis: Data Wrangling with Pandas, NumPy, and IPython, 2nd Edition ed., O'Reilly Media. |

**Other Appendices to be inserted as required.**