**Object Oriented Programming – Java 2**

**Final Project**

**Due Date:**

Dec 9th. Late projects will not be accepted.

**Groups:**

This project must be done in a group of 2 or 3.

Please join a group as soon as possible

**Deliverables:**

At the end of this project you will need to submit

All java code files

All supporting data storage files

The following supporting documentation:

* Business Requirements Document with use cases and use case diagrams
* Design Model Document with class diagrams
* Test Plan with Test Cases
* Training Manual

**Project:**

This project is a GUI application called Issue Tracker which tracks system issues.

**Description:**

You have the option to use text files, binary files or databases to store data for this project.

There are three types of users:

* Manager
* Developer
* Analyst.

The application has 4 pages:

* Login Page – Enter credentials to access the application
* Issue List Page – Shows a list of issues
* Issue Details Page – Show a form to enter new issue details or edit existing issue page
* Add User Page – Create new user

The application is secured via a login screen.

Each user will have a login and password.

When the application starts users see the same login screen

When they log in they see The Issues List page.

There is also an Issue Details page which allows the user to edit an issue and perform an action on it.

All these pages look similar but show different data.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| User/Page | Login | Issue List | Issue Details | Add User |
| Manager | Access | Access | Access | Access |
| Developer | Access | Access | Access | No |
| Analyst | Access | Access | Access | No |

While all the users can see the Issue List and Issue Details page, they see different things on those pages.

Different uses see different subsets of issues in the issues list page. And, they see different buttons on the Issues Details page.

**ANALYST:**

Once the Analyst logs in, they are taken to the Issues List Page

On the Issues List Page the Analyst sees ALL the issues in the list.

|  |  |  |
| --- | --- | --- |
| Control | Condition | Action |
| [New Issue] button | will always be there | This will take the Analyst to a blank Issues Details Page to submit a new issue |
| [Issues] list | will always appear. | This will take the Analyst to a populated Issues Details Page to update the issue |

Buttons on the Issues Details Page

|  |  |  |
| --- | --- | --- |
| Control | Condition | Action |
| [Cancel] Button | will always appear | This will return the Analyst to the Issues List Page |
| [Submit] Button | will appear if this is a new issue. | This will save the issue if it’s new with a status ‘New’  And return the Analyst to the Issues List Page |

When a Analyst logs in they see the Issues List Page they can click on the [New Issue] button, which will take the to a blank Issues Details page they can enter the details and submit. On the other hand, from the Issues List Page they can select one of those issues to go to the Issue Details page to view it, with no edit or save capability. The Analyst cannot change an issue after it has been submitted.

**MANAGER:**

On the Issues List Page the Manager sees all NON CLOSED issues.

|  |  |  |
| --- | --- | --- |
| Control | Condition | Action |
| [New Issue] button | Always appears | This will take the manager to a blank Issues Details Page to submit a new issue |
| [Issues] list | Always appears with non-closed issues | This will take the manager to a populated Issues Details Page to update the issue |
| [Add User] button | Always appears | This will take the manager to the Add User Page |

Buttons on the Issues Details Page

|  |  |  |
| --- | --- | --- |
| Control | Condition | Action |
| [Cancel] Button | will always appear | This will return the manager to the Issues List Page |
| [Submit] Button | will appear if this is a new issue. | This will save the issue if it’s new with a status ‘New’ and return the manager to the Issues List Page |
| [Assign] Button | will appear if the status is ‘New’ or ‘Rejected’ | Changes the status to ‘Assigned’. A developer must be selected and is assigned the issue and return the manager to the Issues List Page |
| [Close] Button | will appear if the status is ‘Validate’ or ‘Rejected’ | Changes the status to ‘Closed’. No work can be done on this project again and return the manager to the Issues List Page |
| [Validate] Button | will appear if the status is ‘Resolved’ | Changes the status to ‘Validated’ and return the manager to the Issues List Page |
| [Fail] Button | will appear if the status is ‘Resolved’ | Changes the status to ‘Failed’ and return the manager to the Issues List Page |

Buttons on the Add User Page

|  |  |  |
| --- | --- | --- |
| Control | Condition | Action |
| [Cancel] Button | Always appears | This will return the manager to the Issues List Page |
| [Submit] Button | Always appears | This will save the User and return the manager to the Issues List Page |

When a Manager logs in to the Issues List Page they see a button to enter a new Issue and they see a list with all the issues. They can click on the New User button, which will take them to a blank Add User Page, they can enter the details and submit. They can click on the New Issue button, which will take the to a blank Issues Details page, they can enter the details and submit. On the other hand, from the Manage Page they can select one of those issues to go to the Issue Details page to view it and change it. Depending on the issue status they will see certain action buttons as listed above. May perform one of the following actions: Assign, Validate, Fail, or Close. They see an Action and ‘Cancel’ buttons.

**Developer:**

On the Issues List Page the Developer sees only issues ASSIGNED, OPENED or FAILED with them as the developer.

|  |  |  |
| --- | --- | --- |
| Control | Condition | Action |
| [New Issue] button | Always appears | This will take the developer to a blank Issues Details Page to submit a new issue |
| [Issues] list | Always appears with assigned, opened, or failed issues | This will take the developer to a populated Issues Details Page to update the issue. |

On the Issues Details Page

|  |  |  |
| --- | --- | --- |
| Control | Condition | Action |
| [Cancel] Button | will always appear | This will return the developer to the Issues List Page |
| [Submit] Button | will appear if this is a new issue. | This will save the issue if it’s new with a status ‘New’ and return the developer to the Issues List Page |
| [Open] Button | will appear if the status is ‘Assigned’ | Changes the status to ‘Opened’ and return the developer to the Issues List Page |
| [Reject] Button | will appear if the status is ‘Assigned’ | Changes the status to ‘Rejected’ return the developer to the Issues List Page |
| [Resolve] Button | will appear if the status is ‘Opened’ | Changes the status to ‘Resolved’ and return the developer to the Issues List Page |

When a Developer logs in they see a button to enter a new Issue and they see a list with all the issues that are they are responsible for. They can click on the New Issue button, which will take them to a blank Issues Details page, they can enter the details and submit. Also, they can select one of those issues to go to the Issue Details page to view it and change it. Depending on the issue status they may perform one of the following actions: Open, Reject, or Resolve.

They see an Action and ‘Cancel’ buttons.

**Use the status flow diagram.**

Note that there are sometimes two possible flows for a single status. For these situations the user should see two action buttons on the Issues Details page, in addition to a Cancel button.

