**(Group Number: 33)**

**(github.com/j1111/299-Haters-gonna-hate-)**

PERSONAL PORTFOLIO - 2

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**Artefact 1** **–** ***(Test Cases - Shared)***

A test case is a document which has a set of test data, conditions or variables under which a tester will determine whether a system being tested satisfies requirements or works as expected.

The test cases that we have produced had the following elements: Test case ID, Test Objective, Precondition, Steps, Test data, Expected result / Acceptance criteria, Post-condition and Test Status.

The “Test Cases” artefact was used in the process of developing test cases that has aided our team in finding any potential problems in the requirements or design of the application. One of the major benefits of writing a test case is that it can be referred to at any point of the developing stage allowing team members to easily understand the end-to-end functionality and performance of any feature. By aiming to uncover any potential errors within our product we have had to follow specific standards relating to writing test cases. This includes testing of each element individually as well as keeping our writing atomic. During our testing we attempted to cover all positive and negative outcomes which has resulted in delivering broader test coverage.

Although test cases exist for every facet of our product, it is easier to explain this testing ideology with the use of an example. The “Welcome Page”, otherwise known as “home” to most, has many interactable features used to connect the user to other areas of the website. With added features greater potential for new errors appears. To handle these errors and test for their existence, test cases are provided to developers to test, record and implement fixes for cases which do not meet their given function and criteria. Examples of this can be found in the provided Test-Cases Excel document, outlining the test cases for each individual feature covering its desired function and purpose in the project.

Through the use of simple layman terms and minimizing of steps taken to complete our tests, we were able to improve the software quality. Making sure that we do not overlap, and complicate criteria contained within the document resulted in delivering excellent test scope. Finally, we can say that in a process of creating our test-cases, as a development team, we were successful in detecting and solving technical issues in the testing process and assessing the overall product usability, performance, security, and compatibility. Following this design methodology has resulted in us delivering an outstanding product fulfilling all of our client’s requirements and specifications.

Dylan – student num (9966005) This was a joint artefact which was created by both Dylan and myself.

***(Supporting documentation for this artefact can be found in Artefacts folder under the sub-folder Artefact 1)***

**Artefact 2** **–** ***(Regression Testing Phases - Shared)***

For the definition of Regression Testing, we could simply, is a verification method which tests for any unwanted effects caused by performed modifications on the system or a specific component in the system.

In our case the priority of regression testing is to re-execute the existing test cases to verify whether the existing functionality is working as expected and the new changes have not introduced additional bugs ensuring the functionality of the application is remaining unchanged. Conducting regression testing is a continuous process performed at various stages throughout the software testing lifecycle.

During the development of our “Pinelands Music School” project we had to create a list of test cases that would cover all possible individual functional variations of our final product. To support “Regression Testing Phases” we also created “Regression Summary of Phases” document that gives a brief description of each testing phase. This supporting documentation also defines how each module being tested should interact with one another. It also allowed us to present our client with an instant summary providing almost instantaneous understanding of what the product should do without needing to check the regression plans test cases. Focus of our development team was to make sure that each implemented element on the individual feature is working as required by our client and is not affecting any other part of the system. Furthermore, we had to test any two or more related features by joining these features together and running test cases designed for these features. As an example, we have regression testing performed on the following two modules in Phase 2 - Modules “Welcome Page & Sign in Page”. For this regression testing phase, we have created seventeen Test Cases in total. This phase of regression testing covers the functionality of all elements such as buttons and hyperlinks placed on the “Welcome” page as well as the functionality of the “Sign In” button. For the first-time user “Sign In” button is the link that takes user to the desired “Create Account Page” that allows account creation (For more in depth information please refer to the “Regression Testing Phases” document).

After conducting thorough regression testing we were able to detect and fix any issues that arouse, ensuring the full functionality of the application remained intact. More importantly, regression testing has helped our team to release the final product with confidence.

Dylan – student num (9966005) This was a joint artefact which was created by both Dylan and myself.

***(Supporting documentation for this artefact can be found in Artefacts folder under the sub-folder Artefact 2)***

**Artefact 3** **–** ***(GUI Mock-Up Sprint 2 User Stories)***

**Low and High-fidelity**

The GUI mock-up technique is web designer’s best friend and an essential tool in web design process. Regardless of it being a simple sketch or it is being done with digital tools, such as “GoMockingBird”. The GUI mock-up is a powerful tool that helps designer in designing an effective product. Major benefit of this tool is that it allows the client to visualize the basic layout, design and content as well as demonstrate the key functionality of the GUI before any interaction is added.

In our second sprint we have created two additional user stories for “Log in” page and “FAQ” page. Therefore, in the process of website creation we had to implement GUI mock-up technique to translate the client’s ideas of the desired product and design concepts into a workable or “useable” product.

In the first iteration we were using simple low-fidelity mock-up also known as paper mock-up. This type of mock-up allows for easy and quick revision and requires less time and resources. What’s more, this type of prototyping has helped our team to discover visual components that do not fit on the page before we got to the final product. We were also able to establish the visual hierarchy between desired elements to achieve a better readability. More importantly, low-fidelity has helped our team to get immediate response from the user. And finally, we can say that we were able to create visually reliable impression of our product enabling client to envision website design.

Once the client has approved the low-fidelity design, as a development team we were focused on developing a high-fidelity prototype. This type of prototyping provides better visual effects than low-fidelity providing our team with complete and final feedback from the client, in terms of details and functionality. Since the high-fidelity prototypes are often designed with more details and functions of final product it was easier for our team to conduct a more in-depth testing on the styles, functions, web elements, colours and layouts. With the better visual effects, we also had a better understanding on how the application should behave.

In conclusion we can say that using these two prototyping tools we were able to uncover missing gaps and potential issues in our design. This has resulted in saving resources and time by escaping unnecessary and costly misunderstandings. Finally, being able to test our product accompanied with precise and in-depth feedback from our client, as a team we were able to deliver the product of high standards matching client’s requirements.

***(Supporting documentation for this artefact can be found in Artefacts folder under the sub-folder Artefact 3)***

**Artefact 4** **– *(Scrum Master)***

As we all know this is our second portfolio and that can only mean that we are more than half way through our semester. Even though as a team we have managed to meet all required criteria, some signs of exhaustion and tiredness were starting to show. Being the Scrum Master, I realised that one of my high priority duties was to keep the team moral on a reasonably high level.

I have realized that Scrum Master role is to motivate and support my team members which in turn facilitates successful outcomes and keeps the momentum going. One of the biggest challenges was to motivate team members to actively participate in our daily Facebook chats and weekly meeting. Even though I have mentioned in my previous portfolio that we should try incorporating new techniques of communication using online voice and text conferencing tools it did not take long before I realised that this new way of communication has made the team feel like we were falling behind with our weekly tasks. Since the Scrum Masters role is to get things done with no wasted time, immediate action was taken on my part. My team members were notified through social media about an emergency Scrum meeting on campus to discuss issues arising which could potentially put the Sprint goal at risk. All team members were obligated to post-pone their current tasks and join the scheduled meeting.

During the meeting we all agreed that the team cohesion and communication ultimately dictates our success as a group. Therefore, we have decided to reinforce the old meeting system, by simply continuing meetings in person 2-3 times per week. Additionally, we agreed that as a team we need to focus on delivering the most valuable features and collaborate until these are done. If any ambiguities arise, team members are obligated to act immediately by asking questions as well as help others when they are in need of assistance.

As a Scrum Master I was exposed to all three elements of the scrum master’s role including administration, coaching and leadership. It was clear that regular communication and information exchange within the team was extremely important for successful outcome of the project at each stage of the development.

Following this, we can say that Scrum Master also played a key role in communicating with the tutor via email or during/after tutorials. Finally, clarification of ideas and design process before the due date ultimately resulted in a better overall result.

***(Supporting documentation for this artefact can be found in Artefacts folder under the sub-folder Artefact 4)***

**Artefact 5** **– *(“Log in” and “FAQ” page)***

**Log in page**

We have created a “Log in” page User Story in our second sprint and it is of a “must have” type. The core function of this page is to enable User to log into the account and allow full access to the system functionality. Main focus was on keeping our ‘log in’ form a primary feature on the “Log in” page, so that Users can login smoothly and start using the full functionality available on the system.

To do so, we had to satisfy the following acceptance criteria:

* Username field box that allows user to type in his/her user name
* Password field box that allows user to type in his/her password
* Check box “Remember me” that allows users to save their credentials
* Submit button that allows users to submit their credentials
* Reset button that allows user to reset field boxes
* Return “Home” button that redirects the user back to the “Welcome” page
* Facebook hyperlink that will redirect the User to the Facebook Page

The first thing that the User needs to do is to create an account. After creating the user account on the “Create Account” page, User can access “Log in” page by clicking on the login button located on the “Welcome” page. Once the User is directed to the “Log in” page, on the page itself user is prompted to enter username and password. Following this, User can select the “Remember me” box to save password. Once the User has entered required credentials, clicks on the “Login” button and immediately gains access to the “Unique User Page” and preview their personal details.

***(Supporting documentation for this artefact can be found in Artefacts folder under the sub-folder Artefact 5 - Log in page Documentation folder)***

**FAQ page**

The “FAQ page” User Story was created in our second sprint and it is of a “should have” type. The Frequently Asked Questions (FAQ) page is the section that deals with the specific questions regarding our business operation. On this page we address most common problems, questions and answers that customers are looking for.

Having an “FAQ” page allows website visitors to find answers to all their questions in one place. Allowing Users to find needed information quickly and efficiently, ensures that the Users leave “FAQ” page with better understanding of all aspects of the “Pinelands Music School” business. Also, by displaying these questions and answers in public shows that the company is not concealing anything, and it is willing to help potential Users to overcome any challenges. The “FAQ” page also plays a key role in developing trust relationship with the target audience. Additionally, it can save money and the resources for the “Pinelands Music School”, because the company will not have to have a dedicated employee answering numerous phone calls and emails.

During the process of “FAQ” page creation, we had to satisfy the following acceptance criteria:

* Questions displayed must be frequently asked by users.
* Return “Home” button that redirects the User back to the “Welcome” page
* Facebook Hyperlink that redirects the User to the Facebook Page

Once the User has read the frequently asked questions, by clicking on the Facebook hyperlink they can be taken to the company’s Facebook profile or redirected to the “Welcome” page by clicking the home button.

***(Supporting documentation for this artefact can be found in Artefacts folder under the sub-folder Artefact 5 – FAQ page Documentation folder)***