Our Group Report

Introduction:

Our group project is focused on developing an application for the flexible and efficient performance of a business. As a team we executed our ideas and as a Scrum group in this specification. As a team we embraced the technique of both designs, user cases, user stories, project management, Kanban and Agile. We also adopted the techniques of important tools such as GitHub, Visual Studio, Docker and Kanban board which had played a crucial part in our software development.

This Specification was broken down into four different parts and each part had different tasks and aims which were tackled together. To achieve our goals, we worked for an organization that needs 'Reporting on population information'. We were assigned to develop a design by applying advanced structure to permit a quick and easy approach to the assigned task of 'reporting on population information'.

Sprint 1:

For the first part, we had assigned each member with different roles and tasks that they will be carrying out this sprint. We had planned a workflow for our project as a group and had targeted to reach the feature to get by in the time for the review point.

We had started off by setting up the important tools and studying the key techniques that will be needed and useful throughout the whole Specification. To meet the task requirement, we had set up the GitHub project, created the product backlog, set up the Docker file/ running, wrote the code of Conduct, created branches in GitHub which were assigned to all team members and first and second sprint released in GitHub (in the first sprint was just building the basics).

Sprint 2:

For the second part, we scanned to make sure task management is properly arranged and that the opening requirement has been implemented through user stories and user cases. Then we had nominated each team member with a different task to complete.

As for the tasks we had created user case diagrams and explained it, showing the sprint board being used and managed. Showed the kanban board being used and managed, showed the project being connected with Zube.io and the team interactions. Tasks were explained as user stories and lastly issues that were put-upon GitHub.

Sprint 3:

For the third sprint, we had the target to have a fully functioning prototype that presents an excellent growth with practical results for our project, which we had showcased and presented with our ideas.

To achieve our target we had implemented many techniques when executing them in these tasks of which first, We explained and set up appropriate unit tests, explained and set up appropriate integration tests, made sure all tests were operating properly in Travis CI, reconditioned the task board with the current tasks updates and progress, administered the updates towards the end goal of the application, display of the GitHub repository declaring implementation of each team member's work input, presenting the route to final project. That consists of database design, pre-filled database with explanation and data, HTML pages and dynamic content taken from our database.

Sprint 4:

For the last and final part, we exhibited our final project that will be withdrawn from GitHub. To reach the end point we had set up the bug reporting application, the final draft and updates on the task board with its needs met, getting the deployment fully functioning, presenting project deployable with help of docker compose file, individual contribution that has been assessed from GitHub and the complete application status and achievements of reaching the target that was declared.

Aims:

The aim of our project is to develop a website that is user-friendly, easy to navigate and minimalist. We have come together as a Scrum team to execute our proposal. With the help of our techniques and present tools achieve our goal.

The organization that we have worked for requires reporting on its population information. To help them accomplish their goals, we as a team worked together to help them to do so. The organization was dealing with a lot of population data which was hard to navigate through, therefore we had crafted a feature that makes it easy for them to go through, which is a lot more straight to the point. For example, organizing countries in the world and countries in the continent from the largest population to the smallest population. Also looking into the personas that was created for its population, we had all kept all their needs and worries in mind.

Objectives:

All tasks were allocated between each team member to work on a specific task and by doing this we were able to meet and identify all the requirements.

By prioritizing the organization requirements like mentioned before we had organized the largest to smallest population for countries in the world, continent, and region, for the same categories we had also organized the smallest to largest population in cities and capital cities. Including the population of the people accommodated in cities, and population not accommodated in cities categorized by, county, continent and region.

As we are still developing the website the top ‘A’ populated, country, district, capital cities, region, world and continent the user will be able to input as requested.

Furthermore, the information of population of the world, continent, region, country, district and city is also made reachable for the organization, including languages that were supplied with the greatest to the smallest percentage of the people. The requested languages were Arabic, English, Chinese, Hindi and Spanish. Additionally, we have formatted the country report in the order of, code, Name, continent, region, population and capital in columns.

Keeping in mind the needs of the population that we had gathered from the personas used to amend our website to those needs. Considering that our aim was also to keep the website minimalist but creative and eye-catching at the same time, we executed this wish by having little to no word except the important information and to visualize, we had added a lot of fun and relevant images and graphics to also make our website eye-catching. Another important feature that we had forced on was making it easy to navigate around the website, which was fulfilled by breaking down into clear, visible and simple categories.

Social Consideration and issues:

Some social factors in web development for an organization are long term commitment and responsibility. The lack of reachable web technologies, for example the browsers has minimum essential and updated assistive technologies.
Some issues that were discussed were the lack of occasion to train in this field.
The report has mentioned ‘web accessibility’ suggests that when creating websites or digital content should be made easy to use for people with disabilities, which many current developers don't take into consideration.[1]
Some disabilities that were mentioned were, people have difficulty with seeing, hearing, speaking, moving and thinking. The website is usable for everyone regardless of any one’s abilities.[1]

As developers, we have kept this in mind. The persona we had received from the population, one of them had mentioned their disability. ‘Linda Beaver’ mentioned that she finds it difficult to navigate around when the layout is clustered together, which is why we have kept our website minimalist.

Background:

The aim of our project is to deliver a web design that is accurate and reliable and is crafted based on the organization and population’s requests and needs which makes it a lot more personalized. Our project is appropriate for an MSc Project as it includes the latest tools and techniques.

Technology Review:

For this project, we have developed this website using multiple programming languages, such as javascript, CSS and python to generate a responsive website enhanced for all browsers, which makes its easily accessible.

Literature Review:

We had administered a literature review on our website design and development. In response we gathered that our website is highly responsive and targets all types of users. We have also researched that it delivers the latest and updated graphics and images that have been used to improve the appearance of the website.

Overall:

Based on our investigation we have conclude that our project is perfect for the MSc project as it uses the latest technology.

Report overview:

This report displays an overview of our group development project for the organization. The purpose of our project was to craft and develop an up to date and user- friendly web design to enhance our user's experience, which promotes high online engagement.
The scope our team project involves developing and creating and designing a website that has a responsive and relevant layout, executing new features that were requested by the organization. The report delivers the methodology and tools that have applied for our project, furthermore it also forecasts the key finding of our project.

Overall, our project forecasts a comprehensive outlook of how we have achieved targets and goals, while also highlighting the achievements of our delivery of user-friendly web design.

Literature or Technology Review:

Technology Review:

Web development carries a huge amount of set rules and techniques. As a web developer you need to familiarize yourself with web technologies that will support you to reach your end goals.[2] Some technology that the publisher Milos Timotic has mentioned, we think would help us massively in improving our website:

1. YII is a free and easy to access web development application, with 'built in PHP5 improved performance, which also includes many great tools amazing for debugging. This web application is also very easy to use.[2]
2. Zen is a helpful tool that allows us to create websites and other web services. Zen is more forced on a programming language named PHP. Its main function is to make sure that those being operated are safe and reliable [2].

Design or Methodology:

Design:

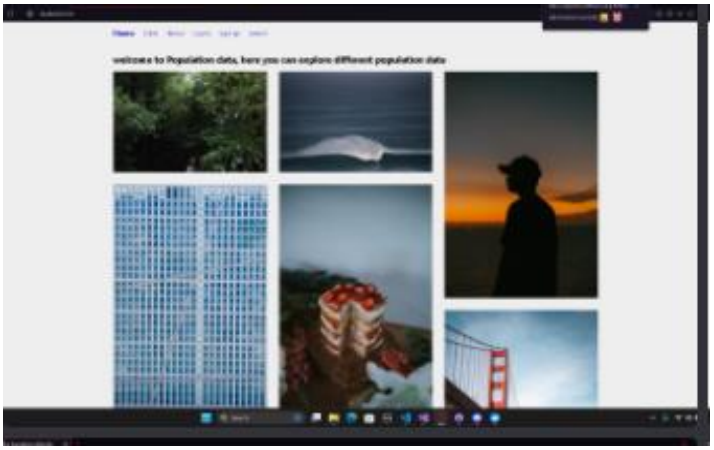

Figure 1

Figure one has been taken from a website called ‘bluestone98’ [3]. I have taken this website as our example because it’s an excellent example of how we inspire our website to be, to further take our website. The various technology that has been used to craft this masterpiece are:

1. User interface
2. HTML
3. Content Management System
4. Responsive Design
5. JavaScript
6. CSS

By applying these technologies and web design tools, a well-designed website can be developed that is appealing, fun and easy to operate.

Alternative Approaches:

Alternatively, we would've liked to create a more interactive web page that includes more animations, making it more eye-catching. We would have liked to play with more colours, while keeping the design minimalist. As for the Alternative technology we
would have liked to use some stronger back-end coding to improve the back-end code.

Implementations:

The outcomes of the project are the development of an application that focuses on the flexible and efficient performance of a business, which is user-friendly, easy to navigate, and minimalist. The project is divided into four parts, and each part has different tasks and aims that are tackled together. The Scrum team executed their proposal, embraced the techniques of design, use cases, user stories, project management, Kanban, and Agile, and adopted important tools such as Github, Visual Studio, Docker, and Kanban board, which played a crucial part in their software development.

The organization that the team worked for requires reporting on population information. To help them accomplish their goals, the team developed a feature that makes it easy for them to navigate through the population data. The team prioritized the organization's requirements and organized the largest to smallest population for countries in the world, continent, and region, and the smallest to largest population in cities and capital cities, including the population of people accommodated in cities and not accommodated in cities categorized by county, continent, and region.

The team also made the information of population of the world, continent, region, country, district, and city reachable for the organization, including languages that were supplied with the greatest to the smallest percentage of the people. Additionally, the team formatted the country report in the order of code, Name, continent, region, population, and capital in columns.

The team considered the needs of the population that they had gathered from the personas used to amend their website to those needs. The website is minimalist but creative and eye-catching, with little to no words except the important information and a lot of fun and relevant images and graphics to make the website eye-catching. The team also developed a bug reporting application, the final draft and updates on the task board with its needs met, and a fully functioning deployment of the project.

Evaluation:

the project was executed successfully, with the Scrum team embracing various techniques and tools to develop an application that focuses on the flexible and efficient performance of a business. The team was able to prioritize the organization's requirements and organize population information for various countries, continents, regions, and cities, including the population of people accommodated in cities and not accommodated in cities categorized by county, continent, and region.

The team also made sure to consider the needs of the population that they had gathered from the personas used to amend their website to those needs. The website is described as minimalist but creative and eye-catching, with relevant images and graphics to make the website appealing.

Furthermore, the team developed a bug reporting application and a fully functioning deployment of the project, which indicates a high level of quality assurance and attention to detail.

Overall, it appears that the project achieved its intended outcomes and delivered a user-friendly and efficient application for the organization.

Related work:

Group 9 did something like us however in comparison ours I can see that we accomplished.

1.Successful execution: The project was executed successfully, indicating that the Scrum team worked efficiently and effectively.

2. Embracing various techniques and tools: The Scrum team embraced various techniques such as design, use cases, user stories, project management, Kanban, and Agile, and adopted important tools such as Github, Visual Studio, Docker, and Kanban board, which helped them in software development.

3. Prioritization of organization's requirements: The team prioritized the organization's requirements and developed a feature that makes it easy for them to navigate through the population data.

4. Comprehensive population information: The team organized population information for various countries, continents, regions, and cities, including the population of people accommodated in cities and not accommodated in cities categorized by county, continent, and region.

5. Consideration of population needs: The team considered the needs of the population that they had gathered from the personas used to amend their website to those needs, indicating that they were customer focused.

6. User-friendly website: The website developed by the team is described as minimalist but creative and eye-catching, with relevant images and graphics to make the website appealing, indicating that it is user-friendly.

7. Quality assurance and attention to detail: The team developed a bug reporting application and a fully functioning deployment of the project, which indicates a high level of quality assurance and attention to detail.

Overall, these positives suggest that the project was successful in delivering a user-friendly and efficient application for the organization.

Conclusion:

In conclusion, the group project focused on developing a website application to efficiently report on population information for an organization. The team adopted various techniques, such as design, use cases, user stories, project management, Kanban, and Agile, and utilized essential tools like GitHub, Visual Studio, Docker, and Kanban board throughout the four different sprints. The project was divided into four parts with different tasks and aims that were tackled together, and each team member was assigned specific roles and responsibilities. The team's objective was to create a user-friendly and easy-to-navigate website with minimalist and creative visuals, keeping in mind the needs and worries of the organization's population. The final project met all the requirements and objectives of the organization, providing a detailed and organized report on population information that was easily accessible and visually appealing.

Reflection:

This project seems well-organized and executed, with the team using a variety of tools and techniques to meet the objectives of the project. The team worked collaboratively to develop an application that meets the needs of the organization, specifically reporting on population information.

The team divided the project into four sprints, each with a specific goal and set of tasks. They used GitHub, Visual Studio, Docker, and Kanban boards, among other tools, to develop and manage the project. The team also utilized design techniques, use cases, user stories, project management, Kanban, and Agile methodologies.

The objectives of the project were clearly identified and prioritized, and each team member was assigned specific tasks to complete. The team organized the population data by country, continent, and region, among other categories, and made the information easily accessible to the organization. They also considered the needs of the population and designed the website to be user-friendly, minimalist, and creative.

Overall, the team seems to have worked well together and utilized a range of skills and tools to develop a successful application.

Future work:

the team has already done a great job in developing a successful application. However, there may be a few avenues that the team can explore to make the project even better:

1. User feedback: The team can gather feedback from the organization and the target audience to further improve the application. User feedback can help identify areas of improvement and ensure that the application meets the needs of the users.

2. Data visualization: While the team has already organized the population data by various categories, they can consider incorporating data visualization techniques to make the information even more accessible and engaging. This can include using charts, graphs, and maps to convey the data.

3. Mobile responsiveness: With an increasing number of users accessing websites and applications on mobile devices, the team can consider optimizing the website for mobile responsiveness. This can improve the user experience and make the application even more accessible.

4. Integration with other systems: Depending on the needs of the organization, the team can consider integrating the application with other systems, such as CRM or marketing automation tools, to provide a more comprehensive solution.

Overall, the team can continue to iterate and improve the application based on user feedback, emerging technologies, and evolving organizational needs.

References:

[1] https://www.w3.org/WAI/EO/Drafts/bcase/2012/soc

[2] https://tms-outsource.com/blog/posts/web-technologies/

[3] https://www.bluestone98.com/?gclid=CjwKCAjwl6OiBhA2EiwAuUwWZQk7Hj4Eul385vyxmJ49hftHNJcH2RYzWLy8-Ac7bxH_pzCtQD3HDhoCu58QAvD_BwE