



Develop a web application using testing strategies to validate that the application meets the requirements.

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Introduction

“The Well-being of Future Generations (Wales) Act is about improving the social, economic, environmental and cultural well-being of Wales.” [1]. All public bodies will need to report on how they are performing against the 7 Goals (fig 01), 5 ways of working (fig 02) and 46 performance indicators of the act; from the 01-04-2017 [2].

The web application, for example could offer a platform for UWTSD to analyse data and visualise reports based on how they are performing against the rules set out in the act.

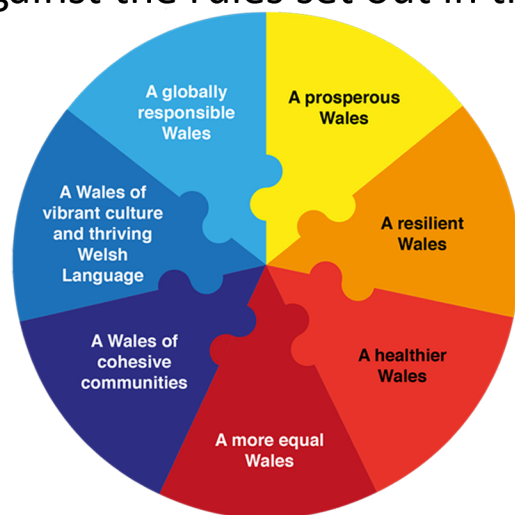


fig 01. 7 Goals [3]



fig 02. Ways of Working [3]

Aims and Objectives

Aim:

Design and develop a MIS solution using testing strategies to validate the development against the requirements of a current UWTSD policy. A case study will be produced to facilitate the investigation.

Objectives:

- Identify the functional requirements needed to meet the rules of the Well-being of Future Generations (Wales) Act.
- Analyse existing methods of displaying and collecting data through web applications.
- Develop a web based dashboard using Unit tests to validate that the application meets the requirements (fig 03).
- Conduct a usability study to evaluate the effectiveness of the web dashboard.

Expected Outcome

- Application developed using Unit tests and testing strategies to ensure it meets the requirements.
- Usability will be evaluated throughout the development lifecycle. Further usability testing will be undertaken after completion to determine the effectiveness of the application and any improvements will be made.
- The end product will be an application that meets the requirements and the needs of the end users, using the Well-being of Future Generations (Wales) Act 2015 application.

Research Methodologies

The results that will be gathered from this project will be a mixture of both Positivism and Phenomenology studies.

- Quantitative data will be gathered from Unit tests.
- Qualitative data will be recorded through usability tests, questionnaires and feedback from demo's.

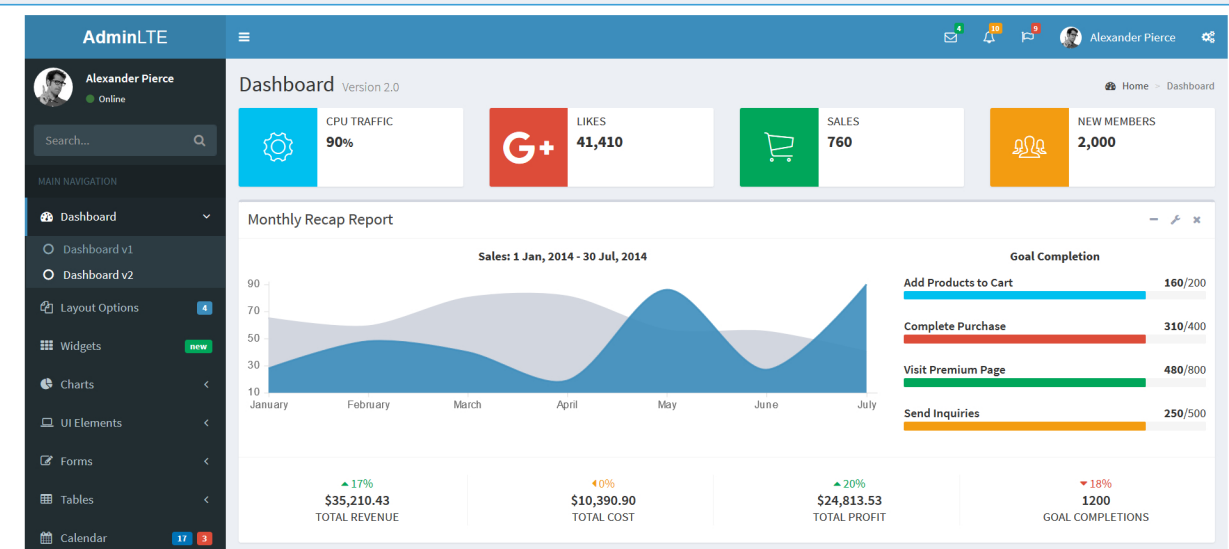


fig 03. Example of a web dashboard [4]

References

- [1] Llywodraeth Cymru Welsh Government, “Well-being of Future Generations Act (Wales),” 2015.
- [2] “future generations | In Brief.” [Online]. Available: <https://assemblyinbrief.wordpress.com/tag/future-generations/>. [Accessed: 05-Oct-2016].
- [3] “Well-being of Future Generations (Wales) Act | The Wales We Want.” [Online]. Available: <http://thewaleswewant.co.uk/about/well-being-future-generations-wales-act-2015>. [Accessed: 05-Oct-2016].
- [4] “Free Bootstrap Admin Template.” [Online]. Available: <https://almsaeedstudio.com/>. [Accessed: 06-Oct-2016].