

Project Management System Research Project for Webmad

Rizky Basir
Student
Ara Institute of Canterbury
rizkybasir17@gmail.com

Dr Christopher Bartlett
Supervisor
Ara Institute of Canterbury
christopher.bartlett@ara.ac.nz

Isaac Trevathan
Supervisor
Webmad Limited
isaac@webmad.co.nz

ABSTRACT

With the various project management system that is available on the market, finding a potential project management system should not be hard. But finding the right one that meets the company's needs or requirements is a challenge. This paper talks about the work integrated learning project at Ara Institute of Canterbury in partnership with Webmad. Webmad currently uses a mixture of SaaS applications including Workflow Max, Trello, and spreadsheets to manages its projects. They find that this is not very efficient. They want the writer to find a single tool or solution to integrate all of this process. This was achieved by gathering Webmad's requirements and researching the market for a potential solution that meets Webmad's requirements.

Keywords: API, Stream Deck, Web Development

1. INTRODUCTION

Webmad, a company specialises in designing and developing websites and software. Webmad was founded in 2012 by directors Isaac and Stephen. Since founded in 2012, Webmad has worked with more than 250 clients.

Ara Institute of Canterbury Ltd is a vocational educational provider that was created in 2016 when Aoraki Polytechnic and CPIT merged. Ara's goal is to expand students' skills and knowledge by engaging with hands on and real-world industry experience to prepare students after they graduate.

The project is conducted for Webmad under Ara academic semester.

Figure 1

Project Poster



2. PROJECT DETAILS

The Problem

Webmad currently uses a mixture of SaaS applications including Workflow Max, Trello, and spreadsheets to manages its projects. They find that this is not very efficient. They want the writer to find a single tool or solution to integrate all of this process.

Project Goal

- The needs of Webmad staff for a project management system are documented

- Assessing various products that meet could meet the needs of a project management system for Webmad
- Have a prototype that meets the needs that 3rd party applications do not meet

Student Goal

- Help Webmad achieve their goals by applying the writer skills and knowledge
- A successful project which leads to good grades, better employability, and good experience

3. PROJECT PHASES

The project has 3 phases that is the requirements phase, research phase, and prototyping phase. The project started with the requirements phase. In the requirements phase, the writer is asked to interview all of Webmad staff to document requirements for the potential tool or solution and also to test Webmad's current applications.

In the second phase which is the research phase, the writer is required to document potential third-party applications or solutions that could meet Webmad needs using the requirements document that was produced in the first phase of the project.

In the third phase of the project, the writer is asked to program a prototype web application, create a plugin for a physical device called stream deck, and create an e-commerce site.

4. METHODOLOGY

The methodology used for this project was a subset of Agile called Scrum. Scrum is commonly used for developing complex software using iterative or incremental practices. With Scrum, it allows companies or organisations to adjust to change of requirements and produce high quality product that meets the business goals.

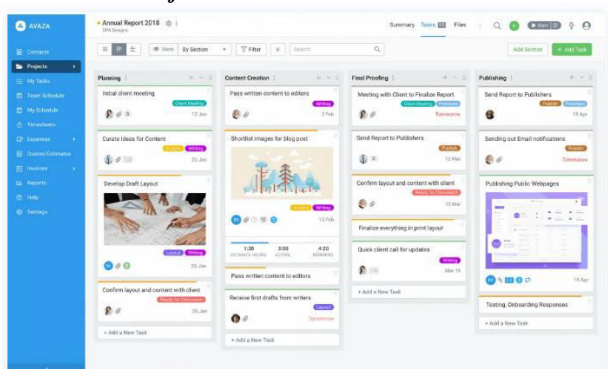
Scrum is executed in a short 2 to 4 weeks cycles called Sprints. Each sprint is a process itself, at the end of each sprint, team members should be able to deliver a version or variation of the final product. The product can be done with minimum effort if it is requested. Each sprint has a list of tasks and objectives. The client of the project decides these objectives.

5. CHOSEN SOLUTION (AVAZA)

Avaza is a business management solution which includes features for project management, resource scheduling, online timesheets, expense management, online invoicing, recurring invoicing, quotes, and invoices and more. Avaza also integrates with third-party platforms to manage workflows. Avaza is an integrated cloud solution for professional services companies and is supported on tablets and mobile devices.

Figure 2

Avaza Main Interface



6. PROTOTYPE OUTCOME

Timer Web Application Prototype

Web application prototype that integrates with Avaza using APIs to start and stop Avaza built in timer.

Stream Deck Timer Plugin

A plugin created for stream deck to start and stop Avaza built in timer equip with custom images and OAuth 2 authentication. User needs to purchase a subscription to enable the plugin

E-Commerce Site

A simple e-commerce site for user to purchase the stream deck subscription. The website is built using WordPress

7. LEARNING OUTCOMES

- Developed and improved programming skills such as JavaScript, PHP, HTML, and CSS
- Learned new technologies such as REST APIs, Postman API, and Stream Deck plugins creation
- Improved project management and time management skills
- Improved communication and teamwork skills
- Improved academic and industry researching skills

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