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| A.E. MOVIE dATABASE  RAD Development |
| **The Imposters**  130 Murdoch Dr  Murdoch WA, 6150  Phone 1800 001 001  Email imposters@amongus.wa.au |



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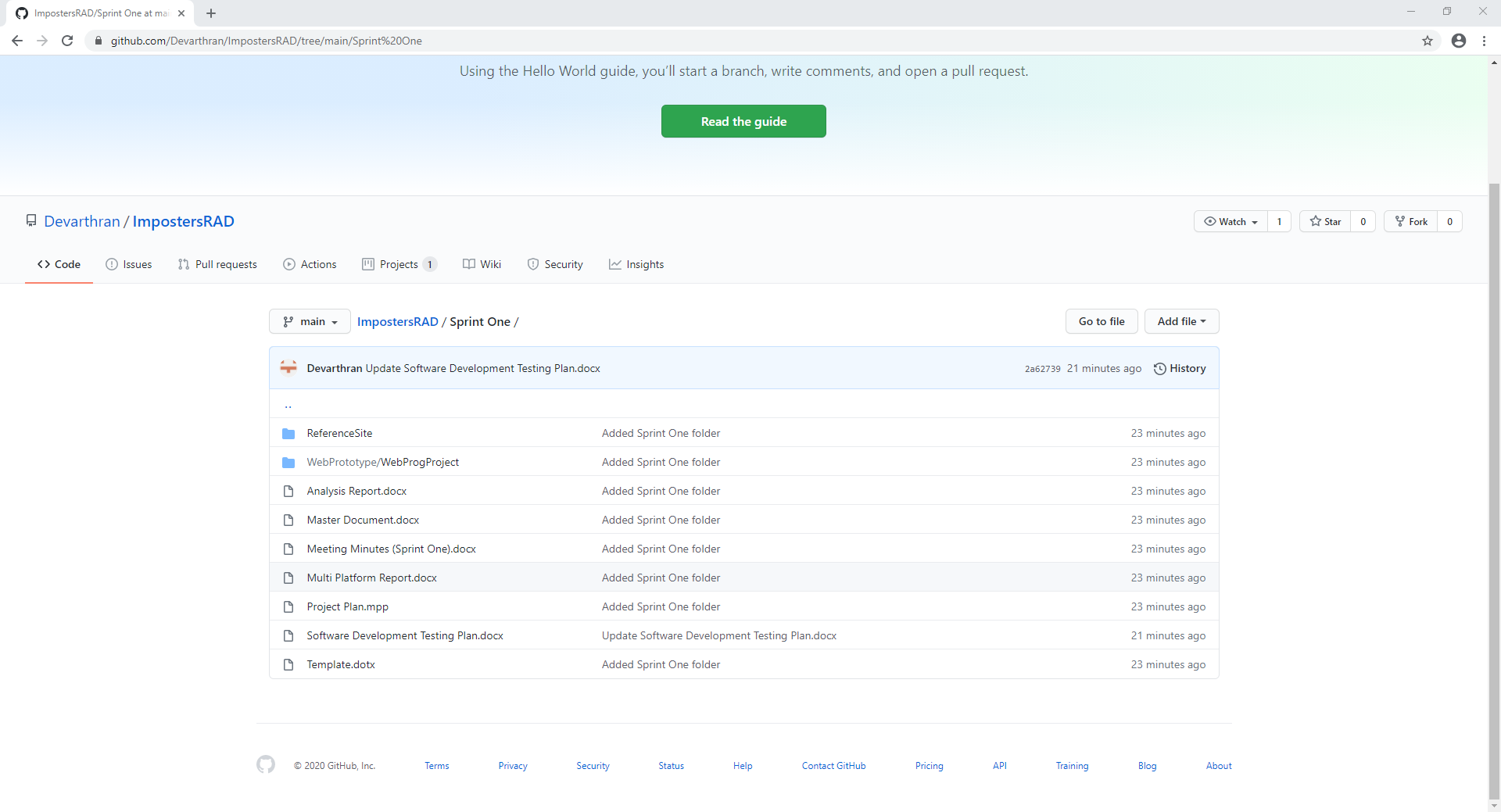
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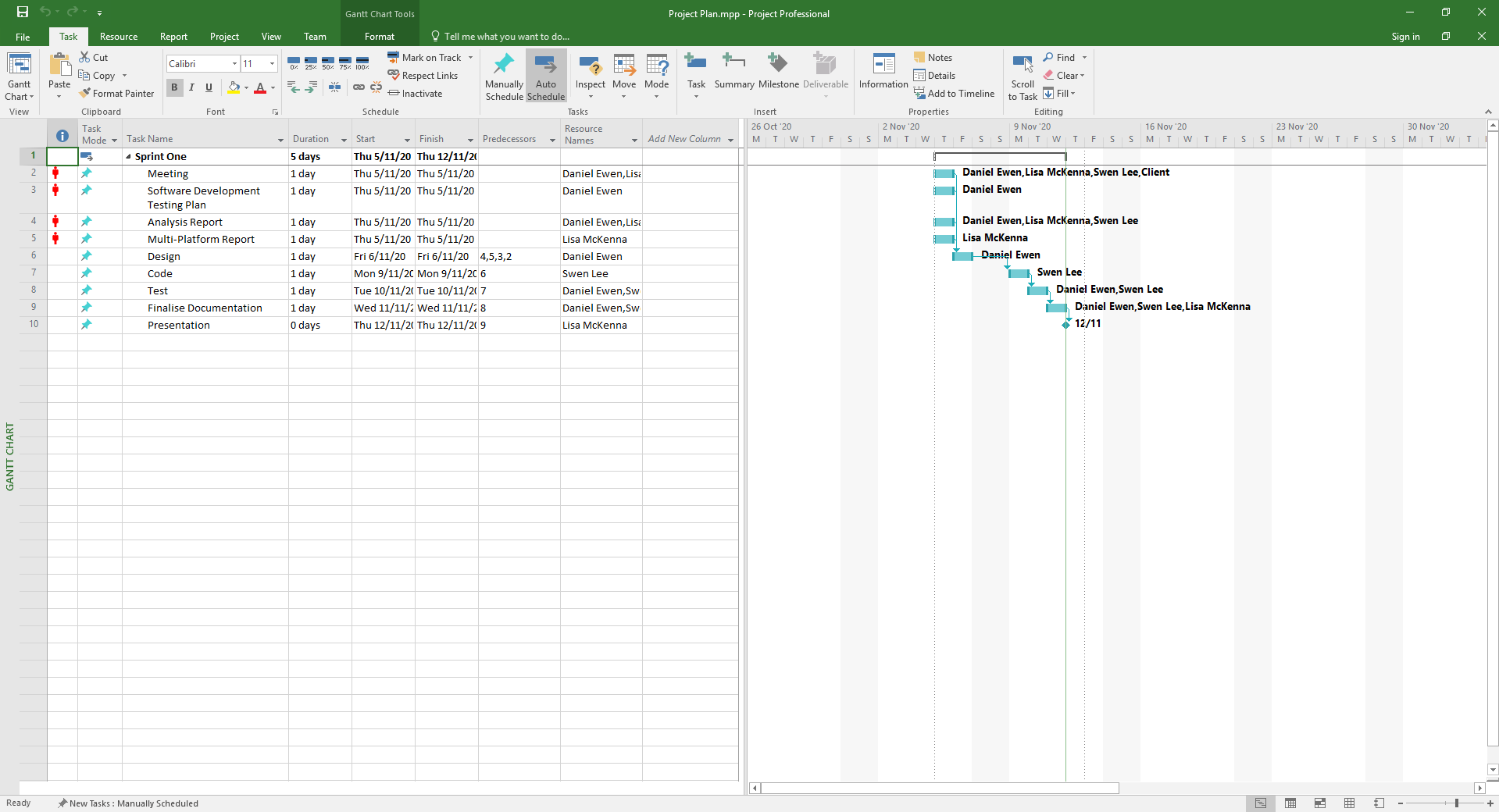
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# Github Snapshot



# Project Management Plan



Software Development Testing Plan

Changelog

|  |  |  |  |
| --- | --- | --- | --- |
| Version # | Date of change | Change by | Outline |
| 1.0 | 5/11/2020 | Daniel Ewen | Test Plan Creation |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Introduction

## Scope

### In Scope

Features to be tested.

|  |  |
| --- | --- |
| Feature | Description |
| Application design is responsive | Application formats automatically to better suite the available screen size. |
| User Interface | User controls are easy to use |
| Interface responds in real-time |  |
| Database migrates correctly to the new design. |  |

### Out of Scope

These are features that won’t be tested.

|  |  |
| --- | --- |
| Feature |  |
|  |  |
|  |  |
|  |  |

### Quality Objective

Our team’s objective is to deliver a working prototype to the client with the following qualities:

* AUT[\*](#_Terms_/_Acronyms) must conform to the client’s requirements for each sprint.
* AUT must meet the client’s quality standards.
* Bugs/defects are tested and fixed before the application is deployed for the client.
* The AUT meets coding and commenting standards defined by each coding language standard.

### Roles and Responsibilities

|  |  |
| --- | --- |
| Role | Team Member/s |
| Developers |  |
| Test Manager |  |
| QA analyst |  |
| Business Analyst |  |
| Bug Triage |  |

# Test Methodology

## Overview

Our team will utilize the RAD[\*](#_Terms_/_Acronyms) test methodology throughout this project. Each sprint will seek to develop, test, and deliver a fully functioning prototype to the specification of the client.

## Test Levels

Our testing team will implement the following test types for this project:

* Exploratory Testing
* Functional Testing
* Accessibility Testing
* Compatibility Testing
* Integration Testing
* System testing
* User Acceptance Testing (UAT)

## Bug Triage

Our process for bug/defect triage is as follows:

* **Bug discovered:** Bug report is added to the bug list. For this our team will use the issue tracker built into GitHub, detailing the bug.
* **Investigate:** Developers read the report and try to replicate the bug. If replication occurs, the bug can then be prioritized.
* **Bug added to backlog:** Bug is awaiting resolution during sprint.
* **Resolved:** Bug is fixed during development and the issue is closed.

## Suspension Criteria & Resumption Requirements

During testing, should any test return more than a 30% fail the following should occur:

* Testing ceases
* Test case / module being tested investigated for design flaws
* If bugs are discovered, add them to the triage queue.
* Once the bug has resolved in the triage queue, run the test again.

## Test Completeness

Testing will be complete when:

* The AUT has been deemed to have 100% test coverage,
* all designed test cases return with a pass,
* all current bugs/issues have been resolved,
* the client is satisfied with the current condition of the AUT and has signed off on its deployment.

# Test Deliverables

|  |  |  |
| --- | --- | --- |
| Deliverable | Author/s | Reviewer/s |
| Test Plan | Daniel Ewen |  |
| Test Cases with validation |  |  |
| Requirements |  |  |
| Analysis Report |  |  |
| Bug Reports |  |  |
| Client Sign-off | Client |  |

# Resource & Environment Needs

## Testing Tools

* **Chromium developer tools:** Exploratory testing and during development.
* **PHP CodeSniffer:** Checks the PHP code for syntax and standards errors.

## Test Environment

### Hardware Environment

A modern development workstation with the following minimum specifications:

|  |
| --- |
| Part |
| Intel CPU 4-cores or more with hyperthreading |
| 16GB DDR4 RAM 2600MHz |
|  |

### Required Software

|  |  |
| --- | --- |
| Software | |
| Xampp | Local webserver and database hosting |
| Visual Studio Code | Code and application development |
| GitHub Desktop | Source Control |

# Terms / Acronyms

|  |  |
| --- | --- |
| Term / Acronym | Definition |
| RAD | Rapid Application Development |
| AUT | Application Under Test |

Analysis Report

# CITE Business Rules

Describes the CITE Business Rules for Software Development

At CITEMS we adhere to our business rules which consist of:

* Prioritising client interests
* Operate in an ethical manner in regards to the regulations
* Uphold accountability during software development

# CITE Managed Services QA

CITE Managed Services (CITEMS) Quality Assurance Practices

According to the [CITEMS](http://www.citems.com.au/?page_id=84) website, our organisation has launched processes which evaluate the project’s performance as well as ensure that quality standards are being followed and that the deliverables meet the client’s requirements.

Some of our quality assurance practices include:

* Conduct full-cycle quality assurance testing
* Document and code reviews
* Defect tracking
* Configuration management
* Process monitoring
* Risk management

CITEMS conducts quality assurance throughout the development lifecycle with our QA team members engaged in every stage. A standard QA lifecycle at CITEMS will involve the following stages:

1. Initiation and Planning – Project specification analysis, test plan explanation and team assignment
2. First review – Early testing of first development deliverables, refining test plan as well as test items (if required)
3. Iteration audits – Ongoing test of intermediate iteration builds
4. Final verification and validation – Final product testing to guarantee bespoke quality and readiness for deployment

# A.E. Development Requirements

Acme Entertainment Pty Ltd development requirements

Acme Entertainment have commissioned a prototype movie database, however, this application is required to be updated to meet the following requirements:

* Able to use across all major digital platforms
* A multi-platform report must be developed explaining the two design options currently used (adaptive and responsive)

MULTI-Platform Report

# Responsive vs Adaptive

Responsive sites and adaptive sites are the same in that they both change appearance based on the browser environment they are being viewed on. (Graham, 2015)

Responsive websites respond to the bowser no matter what the browser width may be, the site adjusts its layout (and perhaps functionality) in a way that is optimised to the screen. (Graham, 2015)

Adaptive websites are only concerned about the browser being a specific width, at which point it adapts the layout. (Graham, 2015)

The simplest way to view this is the difference between smooth and snap design. (Graham, 2015) Responsive design is smooth because the layout fluidly adjusts regardless of what device it is viewed on. (Graham, 2015) Adaptive design, on the other hand, snaps into place because the page is serving something different because of the browser or device it is viewed on. (Graham, 2015)

Here’s an image comparing responsive and adaptive designs from [Medium](https://popart-studio.medium.com/fluid-vs-adaptive-vs-responsive-design-62de51e036bd).



In the example above the responsive picture flows with the environment whereas the adaptive snaps into place at a defined environment. (Graham, 2015)

Responsive design is both fluid and flexible which is a means of becoming device agnostic in the sense that it seeks to create an optimised experience for any screen. (Graham, 2015)

Essentially, we challenge ourselves to create sites that shift context according to how a site is being consumed on any given occasion. (Graham, 2015)

Compare that with an adaptive way of thinking, which is neither fluid nor flexible, but looks for specific points at which to adapt. While it might be difficult to adapt a website on all the various devices being used today. (Graham, 2015)

Both responsive and adaptive designs are similar in the way that they are methods for dealing with the reality that websites are often viewed on different devices in different contexts. They just go about this in different ways. (Graham, 2015)

# Our Decision

Our team’s recommendation is the responsive design, where we have produced a prototype application. As technology is ever changing and moving at a rapid pace, the responsive prototype is delivering a design that is both fluid, flexible and able to adjust its layout and perhaps its functionality in a way that it is optimised to the screen, there for, it can be view on current and future devices. In turn this will future proof the business where it is able grow exponentially.