



# RU Calculator

System Test Documentation

Jan 19, 2019

**Prepared by:**

Joe Do, Ferdinand Tembo, Kevin Tran

## Table of Contents

---

<b>1. Introduction</b>	2
Description of this document	2
Objectives	3
References	3
<b>2. Scope of Testing</b>	3
What's included?	3
What's not included?	4
<b>3. Testing Strategy</b>	4
Functional Testing	4
Regression Testing	4
Deployment Testing	4
Build Verification Test (BVT)	4
<b>4. Resources</b>	4
Environment and Servers	4
Test Machines / Devices	5
Supported Browsers	5
Accounts	5
Tools	5
<b>5. Risks</b>	5
<b>6. Team Roles</b>	6
<b>7. Document Revisions</b>	6

## 1. Introduction

---

### A. Description of this document

This document is a test plan for the ***RU Calculator*** project. It describes the testing strategy and approach to testing that the our team will use to validate the quality of this

project prior to release and identify, dependencies, resources and risks related to this test effort.

## **B. Objectives**

This Test Plan supports the following objectives:

- The system is tested against the functional requirements/specifications.
- Define the activities required to prepare for and conduct testing leading up to initial product launch of the RU Calculator
- Communicate to all responsible parties the test strategy.
- Define deliverables and responsible parties.
- Communicate to all responsible parties the dependencies and risks.

## **C. References**

Related documents for this project can be found in the following locations:

- SRS: [https://drive.google.com/open?id=15cA7mmaJDEVWgycGrXLp\\_tpZaY8iRy20EfC5z1v4fEw](https://drive.google.com/open?id=15cA7mmaJDEVWgycGrXLp_tpZaY8iRy20EfC5z1v4fEw)
- SDD: [https://drive.google.com/open?id=10\\_VA-ZX1XHbgyOCLrGOz1rzl38PAa6kZ7\\_1C6AFyq\\_s](https://drive.google.com/open?id=10_VA-ZX1XHbgyOCLrGOz1rzl38PAa6kZ7_1C6AFyq_s)
- RU Calculator vs Capacity Planner: <https://drive.google.com/open?id=1Zu4RCPdxAx9VcPeCjvMQdNcAdeYHaDtnv8WwGC00Or8>
- Build Verification Test (BVT): [https://docs.google.com/spreadsheets/d/1RB8hb-19A-tdg-jhsqc\\_QGPfHdcpNRJXyjSJvmpMn4U/edit#gid=0](https://docs.google.com/spreadsheets/d/1RB8hb-19A-tdg-jhsqc_QGPfHdcpNRJXyjSJvmpMn4U/edit#gid=0)

# **2. Scope of Testing**

---

This project will be developed using agile methodology and executed in two week sprints. Sprint planning meetings will be held prior to each sprint to identify the features to be implemented in each sprint.

## **A. What's included?**

Our team will make sure final product matches the approved design from Alfred, our instructor. We will come up with a list of all possible test cases and execute them based on the *Test Matrix* that has been signed off by the team.

## B. What's not included?

Testing the code or anything that is related to the current RU calculator.

# 3. Testing Strategy

---

## A. Functional Testing

The system is tested against the functional requirements/specifications. Test cases will be identified based on tasks in Trello. We will update these test cases during the development phase.

## B. Regression Testing

The purpose of this strategy is to ensure that changes (enhancements or defect fixes) to the software have not adversely affected it. How we perform regression testing will depend on the kind of works that we implement. It can be a smoke test around a new feature that we implement to make sure nothing is broken. Spending one to two hours to play with a new build will ensure we capture as many broken pieces throughout the app as possible.

## C. Deployment Testing

Deployment testing is defined as the systematic installation and configuration in a test environment in an attempt to ensure a deployment plan includes all the necessary steps for successful integration into a production environment.

## D. Build Verification Test (BVT)

The BVT will include the core functionalities of the RU Calculator. It is a set of tests run on each new build to verify that the "happy path" functionality of the app works as expected; in certain cases a BVT may also extend to cover selected error scenarios.

# 4. Resources

---

## A. Environment and Servers

Environment	URL/Install Path
Development	Local Machine
Test	TBD
Staging	TBD

Production	TBD
------------	-----

## B. Test Machines / Devices

The following computers/devices will be used by the team to use to test this project:

- 2014 Asus, Windows 10, Intel core i5, 4GB Ram
- Dell, Windows 10, Intel core i7, 8GB Ram
- Surface Pro, Intel core i5, 8GB Ram

## C. Supported Browsers

The following browsers will be supported/tested for this project:

Browser/Client	Operating System
FireFox	Windows 10
Chrome	Windows 10

## D. Accounts

Azure Cosmos DB account:

- Email: [ThisIsLikeTheThirdAccount@protonmail.com](mailto:ThisIsLikeTheThirdAccount@protonmail.com)
- Password: ThisIsThe@ccount3

## E. Tools

- Trello: tracking story requirements
- Github: our source code repository
- Slack: official messaging tool with instructor
- Facebook: internal messaging tool among students

# 5. Risks

---

This is the first time we work with Cosmos DB. Everything is new to us so we need to perform research in parallel with development. Writing code in the server side is also something we have never done. We need to work with our instructor to understand how to perform coding from the server side.

