Project Plan

Captain CyBeard: Neil Before Us

**Ryan Breitenfeldt | Noah Farris
Trevor Surface | Kyle Thomas**

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Revision History

Revision	Date	Author(s)	Description
2.0	12.08.2019	KT	Added new gantt chart
1.1	11.12.2019	KT	Performed Edits
1.0	09.27.2019	RB NF TS KT	Completed Document
0.5	09.27.2019	RB	Filled in Estimate section
0.4	09.26.2019	KT	Filled in Approach section
0.3	09.24.2019	RB NF TS KT	Filled in scope and added diagram
0.2	09.19.2019	KT	Filled in Introduction Section
0.1	09.12.2019	KT	Document Creation

1   Introduction

This document is a project plan for developing a Django Web Application that allows Cypherpath users to enter a URL for online Virtual Machines and select which Virtual Machines will be downloaded onto Cypherpath's servers. The purpose of the project plan is to provide a roadmap for Cypherpath and the software development team of the development process and help keep track of the progress.

Cypherpath is a company that provides a product called *Resiliency Platform Tool* that stores virtual networks, machines, configurations and more enabling their customers to quickly recover from cyber attacks such as ransomware. Currently, customers need to manually download their virtual disk images from the various cloud platforms they are subscribed to (such as VMware or Amazon Web Services) and then upload them to Cypherpath's platform. This application will allow customers to have their virtual disk images transferred directly into the Resiliency Platform.

Subsequent sections of this project plan will cover the scope of the project, the software engineering approach that will be used for the project and an estimate for how long the project will take broken by task in the form of a Gantt Chart.

2   Scope

The project is to develop a Python-Django web application that allows a user that is logged into the application to enter a URL that points to one of several possible cloud based VM platforms and be presented with the authentication for that platform. After the user enters their credentials for the VM platform they will be presented with the virtual disk images they have on their account that are available to download. These virtual disk images are Cypherpath's customers virtualized appliances that are used for their business tasks.

The application will present relevant information to the user such as the directory structure, names of the VM images, and a way to select which files and folders to download to their local machine.

The first platform to focus on for interacting with will be VMware. Time permitting, other platforms such as Amazon Web Services (AWS), Citrix, Google Drive and Dropbox will be added. The application will have a modular design with both cloud platforms and authentication mechanisms so more can be added in the future.
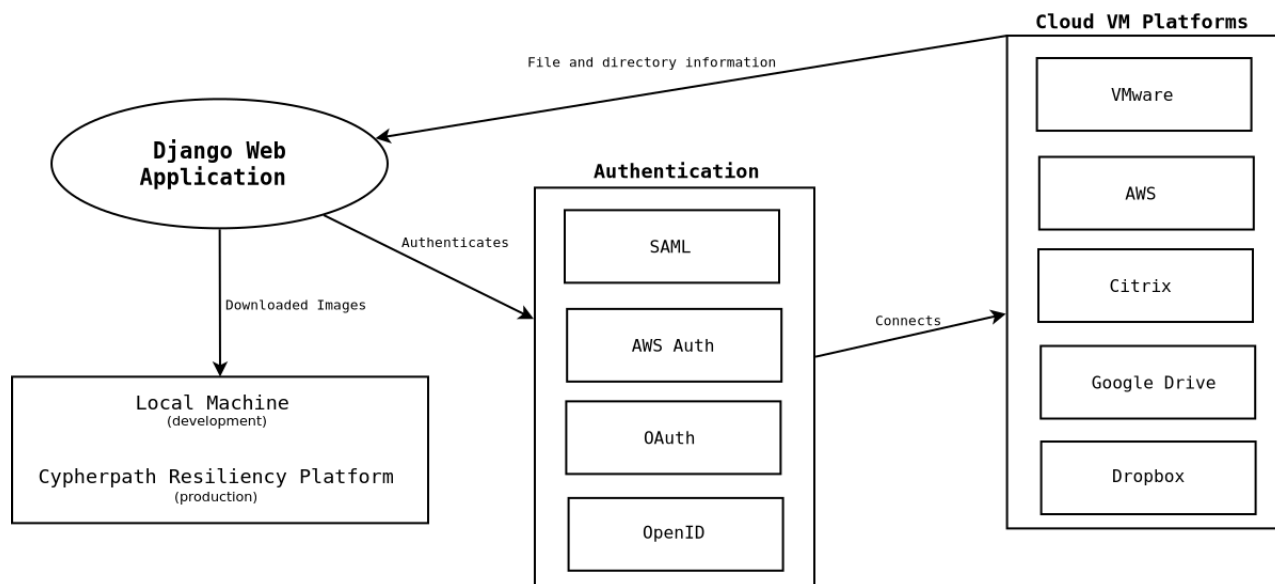

Figure 1: The application environment

3 Approach

The software engineering approach that will be used for this project is the **Agile Scrum** approach. This iterative approach will ensure that the software development team will remain on track and that Cypherpath will receive the maximum amount of value for their time.

The project will be implemented as a Python-Django web application, Python version 3+ and Django version 2+ will be used. The Python-Django framework provides the tools and environment needed to develop and test a web application such as a lightweight web server and SQLite. For version control the software development team will be using git with a remote repository hosted on Github. Once the project is completed, Cypherpath will host the web application within their infrastructure.

4 Estimate

The project is estimated to take two academic semesters in order to complete collecting requirements, designing, implementation and testing. The estimated date to complete the project is Wednesday April 4th, 2020. The project is estimated to take 375 hours to complete.

The following page will contain a breakdown of the tasks and estimated time to complete them for the project.