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COSC412

Professor Broadwater

**Online Retail Bot(ORB) SPMP**

**1. Introduction**

**1.1 Project Overview**

The purpose of this project is to create a functioning online retail bot. The bot will be used to automate the checkout process on certain sites.

**1.2 Project Deliverables**

* Functional Sneaker/Online Retail Bot
* Website to display and sell bot
  1. **Evolution of the Software Project Management Plan**

Development of a sneaker bot may be too difficult. Sneaker bots are the most popular form of bot by far, because of this there are many solutions to preventing their use. I may have to develop a bot for other retail stores who are not regularly met with bot activity.

**1.4 Reference Materials**

*SPMP Template*, users.csc.calpoly.edu/~jdalbey/205/Mgmt/SPMP.

**1.5 Definitions and Acronyms**

* SPMP: Software Project Management Plan
* API: Application Programming Interface
* Bot – A computer function that serves a specific purpose.

**2. Project Organization**

**2.1 Process Model**

* SPMP: 3/31
* Finished bot and website: Early May

**2.2 Organizational Structure**

1 Developer

**2.3 Organizational Boundaries and Interfaces**

N/A

**2.4 Project Responsibilities**

I am the sole developer of this project.

**3. Managerial Process**

**3.1 Management Objectives and Priorities**

To complete the production of an online retail bot

**3.2 Assumptions, Dependencies, and Constraints**

* The development of this bot will be much more difficult than I had originally thought. Due to the fact bots have been around for some time now, with many being patched.
* The amount of proxies I can buy to test the bot (cost constraint)
* The amount of information on how to make a successful bot is limited. The best ones keep their secrets hidden obviously.

**3.3 Risk Management**

Risks:

Ensuring Users cannot share their bot: To ensure this does not happen I will be implementing a private key with the sale of the bot

Securing Users information: In order to ensure that user information is stored correctly and safely I will implement the proper safe guards required.

**3.4 Staffing Plan**

Quincy Pyles – Developer

**4. Technical Process**

4.1 Methods, Tools, and Techniques

* Python – Used to program Bot
* Shopify API – Used to communicate with shopify websites
* Beautiful Soup – Used to gather information from browsers
* Selenium – A web based automation tool to send request to browsers

4.2 Software Documentation

TBD

**5. Work Packages, Schedule, and Budget**

**5.1 Work Packages**

Fully Developed Bot

Schedule: Early May

Budget: $50

**5.2 Dependencies**

The online retail bot must be able to use private keys to authenticate each users purchase. This should be linked to the website where the bot can be purchased and as a result is dependent.