## **Raspberry Pi Headless Server Demonstration**

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**Team Potato**

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## **Executive Summary**

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## **Physical Components**



Raspberry Pi 4 with 4GB RAM. The Raspberry Pi 4 has drastic improvements over the previous generations of Raspberry Pi. The Pi 4 uses a 1.5GHz quad-core 64-bit ARM Cortex-A72 CPU, which provides nearly three times the performance of the Raspberry Pi 3 processor. Up to 4 times the RAM, a pair of USB 3.0 ports, a pair of USB 2.0 ports, a GPU capable of driving 4K video output, dual micro-HDMI ports, Bluetooth 5.0, and a new USB-C power port.

## **Software**

Raspbian

Mindustry Server

Javascript

Python

Bashscript

For the operating system of the Raspberry Pi we decided to use Raspbian, which was installed via the New Out Of Box Software.

The server software that is being implemented is a video game titled Mindustry. Mindustry is a hybrid of resource gathering and tower defense. The players collect various resources which are used to build structures, turrets, and feed ammo to their turrets.

Javascript – Matt?

Startup Script used to acquire the IP Address of the Raspberry Pi. As MCC has prevented our Raspberry Pi from connecting to the MCC-Crypto network, the script was written to find the IP Address of the Ethernet port.

Output IP address to text file, email text file?

## **Project Assessment**