

# Technical Documentation of Application

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## 1. Introduction

### 1.1. Purpose

This document describes the contributions of our team, and provides a brief technical documentation of important files and more. Those involved in the documentation and development of this document and our project are Abigail Rosas, Devaansh Mann, and Vanessa Juarez.

### 1.2 Definitions, Acronyms or Abbreviations

Any definition, acronyms or abbreviations used in this document will be listed below.

## 2. Technical Documentation

### 2.1 Important files

Give a list of important files within the application with a brief description. This may include files created by the development team, databases accessed during the program's operation, and third-party utility programs

The File that is necessary for the game and was developed by our team is the snakegame.py file.

### 2.2 Source Code documentation

Module names and descriptions

```
import pygame
```

This allows us to run the game.

```
import random
```

This is used to randomize the movement of the snake for it to make new decisions on where to go, as well as is used to randomize the placement of the food.

```
import matplotlib.pyplot as plt
```

This allows us to plot the scores of the snake and visually represent its progress.

```
import torch
```

```
import torch.nn as nn
```

```
import torch.optim as optim
```

```
import torch.nn.functional as F
```

This is used to build and train the neural networks.

```
import numpy as np
```

This is used to handle the game state.

```
from collections import deque
```

This is used to handle the memory, removing the older memory to make space for new improved ones.