

# Exploring the usage of APIs in video game companion application

## Introduction

The aim of this project is to expand upon the various tools and APIs provided by video game companies and explore the advantages a player that knows how to make use of them has over a casual player. For this particular project, I've chosen to study the tools offered by *World of Warcraft* as it presents an extensive variety of APIs. These offer plenty of data that can be manipulated by simple programs to return advantageous information that would be, otherwise, more time-consuming to obtain by the occasional player.

## Technology and Methods

Due to the nature of the project being heavily based on processing the files returned by the API, but not much more else needed in terms of technologies, Python proved to be the best option, as it is incredibly easy to learn, hence making it accessible for any player to pick it up and create a companion application.

Using a REST API to request and respond information with the server enables the player to quickly authenticate and subtract all the practical data it needs.

## companion application



Figure 1: Auction House  
Source: Adapted from [1]



## Results

In this game, the auction house (figure 1) has different listing across all servers, therefore, to check the content of different realms requires the player to log out and log back in.

Creating a tool that accesses these listing outside of the game substantially reduced the time needed to compare the prices across realms, therefore creating a gap in time needed between the casual player and the accompanied player by allowing the fastest to respond to changes in economy swiftly.

This has raised questions in terms of morality and ethics in using such APIs to gain an advantage over people who don't. However, the fact that these APIs are readily available to anyone proves that any player that wishes to close the gap between a competitive player and a casual player can pick up the documentation of the game and create countless of useful tools that would otherwise be inaccessible or hard to get through traditional means.

## Auction House API

EXPAND ALL

### Auctions

GET /data/wow/connected-realm/{connectedRealmId}/auctions

Source: Adapted from [2]

### References:

- [1] Blizzard Entertainment, Irvine, CA, USA, *World of Warcraft*, 2004
- [2] Blizzard Battle.net Developer Portal, *World of Warcraft Game Data APIs*. [Online]. Available at: <https://develop.battle.net/documentation/world-of-warcraft/game-data-apis>

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