**SDD HSC major work Documentation**

**Problem statement**

I realised that during every gamer experience that at one point in time they will face gamer

block, a phase where there is no good game out or don’t know what to play. The solution GamersGateway, using flask and visual studio code I will create a web app that will randomly select a game from a list of thousands on steam using request to API that returns the appid and name, then it will go and use the steampowered api to send a request out for the information and return it in JSON format. Additionally the app will use a web scraper that will search on bing for the image relating to the game and then return the first image result that pops up The Applications features will involve the user generating a game at random or if you have a specified genre, you wish would play the app will allow the user to enter an input of the specified genre they want to play. The information about the game being returned will consist of an image the name and developer, trailer, description of what it is and price. However, there are some limitations due to time constraints like I was planning to add a feature of saving the games they like but with time it was too difficult to implement.

**Legal and Ethical issues**

**Legal**

There are two main legal issues within the app GamersGateway are the use of intellectual property such as copyright law, and when planning to monetize the app. The use of intellectual property is to tie pieces of software to a person and stop it from being copyrighted, in my app the game description, trailer, or images might be copyrighted. And if I display these assets it could infringe on the rights of the content owner, an example in my app is that using steampowered API has links to videos and images relating to the specified game. Where developers may have copyrighted the file and only given access to steam. Additionally, if I plan to monazite my app and make advertising, I will have to make sure that the owner of the external data accepts the use of data on commercials and that the APIs and content providers complies with the commercial use policies.

**Ethical**

There are 2 main ethical issues within the app GamersGateway and that is firstly an algorithmic bias opinion, secondly Content moderation through relevant information. Algorithmic bias is a key ethical issue as within the app as a developer I could show favouritism towards specific game developers, meaning the idea of randomly generating games would be tarnished through prompting more frequent displays of certain developers. Furthermore, the use of content moderation as the API being sent data request could contain false information about the developer or game to deter the user from buying the game, which would ruin the reliability of the app and potentially lose user interest.

**Functional and non-function requirements**

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| Functional | Non-functional |
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**Algorithmic description**

Fetch\_Game\_Trailer() function:

1: creates variable trailers to store the specified area movies within the data dictionary of the random game

2: uses a for loop to request all the mp4 or webm URL for the trailer