1. Describe what data is stored in the database. (Where is the data from, and what attributes and information would be stored?)

- a. This database stores information about video games that are available on Steam, a digital distribution platform for video games. The data is derived from publicly available Steam APIs and steamspy.com.
- b. The database contains relevant information such as the name of the game, its initial release date, the minimum and recommended age for players, developers, DLCs, the metacritic score, and the number of recommendations. The database also includes information on the platforms the game is available on with minimum and recommended systems and whether or not it is free, has a purchase option, or a subscription option. It also includes information about the categories the game belongs to (such as single-player or multiplayer).

2. What are the basic functions of your web application? (What can users of this website do? Which simple and complex features are there?)

- a. Search for games based on certain specifications (price, type, hardware requirements)
- b. Top/Trending Games Leaderboard, the website will display the highest rated or most played games on a leaderboard style table
- c. Access records to add/remove games or update games with new information. Any old record will be moved to a backup database.

3. What would be a good creative component (function) that can improve the functionality of your application? (What is something cool that you want to include? How are you planning to achieve it?)

- a. "This or that" game to give a new game rec
 - i. Plan to achieve: On our website we will have an option for user to click on "This or That" bar that would direct them to a page with two game options and they would click the one they like better. This would go one for 5 rounds and at the end the website would recommend a game.
- b. "Shopping cart maker" that works with a budget to propose you lists of games
 - i. Plan to achieve: We plan to achieve this by using the price column of the database. Similar to the "This or That" process, we would ask users to input their budget range and make a "game shopping list" for the user.
- c. Game Comparer goes by category, highlights better one (could use chatgpt api to write extra comparison)
 - Plan to achieve: Compares two user input games and we plan to achieve by the features of those two games in the dataset such as its availability, age group, language available, and computer compatibility.
- d. Recommender based on library
 - Plan to achieve: User could select the games they have played and the genres of the games. This would essentially create a user database and the game would be recommended basd on that library.

4. Project Title

a. GameKeeper

5. Project Summary: It should be a 1-2 paragraph description of what your project is.

- a. Our project is a solution to gamer's dilemma of choosing a game when they are bored or when they want to explore new games. We will be creating a website called GameKeeper that would recommend games based on user inputs such as age, computer, genres, prices, and also data we have such as reviews. We are considering multiple features including:
 - i. A leaderboard that gives you the most popular/highest rated games.
 - ii. A search feature that finds you games based on specifications.
 - iii. Access to records so that you can manipulate the database.
 - iv. A small choice game that helps recommend you a new game based on your preferences between other games.
 - v. A shopping cart maker that, based on specifications and budget, will give you potential lists of games.
 - vi. A game comparison tool that can take two games and compare them side to side.

6. Description of an application of your choice. State as clearly as possible what you want to do. What problem do you want to solve, etc.?

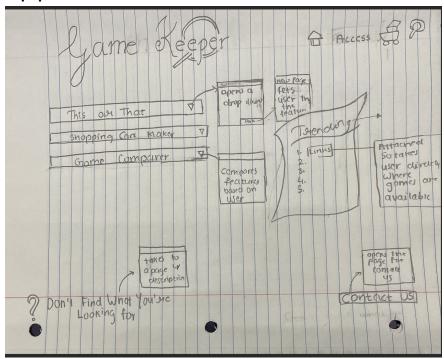
- a. The shopping cart maker helps people on a budget or/and with certain hardware specs by recommending games they can afford to buy and runs decent enough on their device
- b. "This or that" recommender is based on the popular filter on Instagram/Snapchat that helps users choose between things (e.g. what they want to eat) and this is a potential idea to recommend a new game the user may want to try
- c. The recommender based on the library depends on the website being able to access the games in the user's steam library, either by linking their steam account to the application or by inputting what games they own. Based on what games the user owns and enjoys playing, the recommender can bring up similar games the user may want to play.
- 7. Usefulness. Explain as clearly as possible why your chosen application is useful. Make sure to answer the following questions: Are there any similar websites/applications out there? If so, what are they, and how is yours different?
 - a. We specifically chose this dataset because it interested us and the potential it has. It is important to be interested in the project and most of us use STEAM often so we were interested in how the data from steam could help players explore their interests. In addition, there are multiple games that are underrated and our project would not necessarily recommend games purely based on popularity and give games a chance to get attention as well as give users the

best gaming experience possible. There are a few sites that offer similar functionalities based on the same data, including:

- i. Steamspy.com
- ii. Steamdb.info
- iii. Steam website

Our gaming search engine includes creative features detailed in #6 such as "This or That" which are very popular on social media and that is our biggest differentiator. In addition, as stated earlier, our search engine will recommend based on data, not potential profit, biases, or sponsors.

- 8. Realness. Describe what your data is and where you will get it.
 - a. Our data can find the foundation of its answers in the provided database. We can also make API calls and use python libraries to potentially access Steam user data for some of our more complex functionalities. Some services to look into could be:
 - i. SteamKit
 - ii. SteamSpy
 - iii. ValvePython/steam
 - iv. Steamctl
- 9. Description of the functionality that your website offers. This is where you talk about what the website delivers. Talk about how a user would interact with the application (i.e., things that one could create, delete, update, or search for). Read the requirements for stages 4 and 5 to see what other functionalities you want to provide to the users. You should include:
 - a. A low-fidelity UI mockup: What do you imagine your final application's interface might look like? A PowerPoint slide or a pencil sketch on a piece of paper works!



- b. Project work distribution: Who would be responsible for each of the tasks or subtasks? List of the person responsible for which exact functionalities in section 6. Explain how backend systems will be distributed across members. Be as specific as possible as this could be part of the final peer evaluation metrics.
 - i. First, we will take care of our smaller, yet more critical features. This includes the search and the record access that we have to include. We will also take this opportunity to work on the leaderboard on our home page and the game comparison. Meanwhile, those with less work on the smaller projects can take the time to connect our website with the Steam User Library API.
 - 1. Sprint 1
 - a. Person 1 Search function
 - b. Person 2 Record Access
 - c. Person 3 Game Comparer
 - 2. Sprint 2
 - a. Person 1 and 2 Steam User Library API
 - b. Person 3 Basic Frontend
 - ii. Then, after we have the necessary functionality for our MVP/Midterm, we can work on more complex technologies. In our final sprint, we can work on the frontend again, and add a leaderboard last.
 - 1. Sprint 3
 - a. Person 1 Library Recommender
 - b. Person 2 "This or That"
 - c. Person 3 Shopping Cart Maker
 - 2. Sprint 4
 - a. Two Team Members Finalize Frontend
 - b. One Team Member Leaderboard