What Can We Play Today?

CST 489 Capstone Project Planning

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Executive Summary

What Can We Play Today? is a web-based service designed to help PC gamers easily discover shared games and simplify gaming with friends. By comparing users' Steam libraries, the platform quickly identifies common games, streamlining the process of finding mutually enjoyable gaming opportunities.

The primary goal of this project is to provide a tool for PC gamers to find games to play together, but can be used to also foster a sense of community among PC gamers by providing a tool for finding and organizing multiplayer gaming sessions. With an ever-growing library of games available on Steam, it can be a challenge for users to coordinate gaming sessions with friends who have different gaming preferences and collections.

Our solution will leverage the Steam API to access users' game libraries and compare them in real-time, generating a list of games both parties have in common. The platform will also incorporate user-friendly features, such as the ability to filter results by descriptors like game genre, to schedule gaming sessions on relevant calendars directly through the website, or even provide more tailored results if users fill out a small optional survey before comparing games.

In order to create a successful and engaging platform, we will focus on intuitive simple design, seamless integration with Steam, and maintaining a strong emphasis on user privacy and security. Once the project is complete, we expect that What Can We Play Today? will become a valuable tool for PC gamers looking to enhance their social gaming experience.

Ultimately, What Can We Play Today? will promote stronger bonds among friends, provide an easy-to-use solution for organizing gaming sessions and contribute to the growth of the online PC gaming community.

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Introduction/Background

Project Name and Description

"What Can We Play Today?" is a web-based platform designed for PC gamers who use the Steam platform. Its purpose is to facilitate the discovery of common games in users' Steam libraries, making it easier for friends to organize and engage in multiplayer gaming sessions. By fostering a sense of community and simplifying the process of finding shared gaming experiences, "What Can We Play Today?" seeks to contribute to the growth of the online PC gaming community.

Problem and/or Issue in Technology

The vast number of available games on Steam poses a challenge for users trying to coordinate multiplayer gaming sessions with friends who have different gaming preferences and collections. Identifying games both parties own and enjoy can be time-consuming and cumbersome, leading to missed opportunities for social gaming experiences.

Solution to the Problem and/or Issue in Technology

"What Can We Play Today?" addresses this issue by leveraging the Steam API to access and compare users' game libraries in real-time. The platform will generate a list of common games, streamlining the process of identifying mutually enjoyable gaming opportunities. Additional features, such as filtering options by genre and scheduling functionality for gaming sessions, will further enhance the user experience. Prioritizing user privacy and security throughout the platform's development will also ensure a safe and trustworthy environment for gamers.

Environmental Scan/Literature Review

We have found two major websites that replicate the functionality we're trying to achieve.

Steam Gauge (Prusik, J. (n.d.). checks all your current friends and compares libraries to find common multiplayer games, what the tool doesn't do is limit the search to certain friends or require those friends to open access to their libraries as many friends will show up as "No Shared Games" under the current setup the website has; it also has only a single warning that you need to make your account public, but with the more granular permissions Steam has now you'd need to change more settings for the website to work.

Steam Companion (Steam Companion: Steam Game Finder. Steamcompanion. (n.d.)) looks sleeker and performs the same task of comparing shared games with your friends (assuming their profiles and yours is public like the previous website). Games that show up are linked to the Steam website to view.

It is to be noted that while there are no account logins for either of these sites, you can put in your (or anyones really) Steam ID and if their account is public then you can check shared games with their friends. While this isn't an inherent privacy/security issue as you have to set your account to be public in the first place, we'll bypass this entirely by requiring each user to login on their own account and set their account flags to allow the website to work (and also that they can turn off the flags later if they desire) so that you won't be able to see other random users profiles, just whoever wants to check their shared games.

The visual design of both websites are functional, but are lacking and could be improved on to provide an even smoother experience navigating and using the website as any points of friction could be an easy deterrent for a potential long-term userbase.

Stakeholders

End Users (PC Gamers)

The primary stakeholders in this project are PC gamers who use the Steam platform to engage in multiplayer gaming sessions with friends. They stand to gain from an easy-to-use tool that simplifies the process of finding common games, leading to enhanced social gaming experiences. If the platform does not prioritize privacy and security, end users may be at risk of exposing personal information or experiencing unwanted intrusions.

Developers

The developers involved in creating the platform have a stake in the project's success, as it will reflect their skillset and work quality. They may benefit from the project's success, such as potential employment opportunities or increased professional recognition; however, they may also experience drawbacks if the project encounters significant issues or fails to gain traction among the target audience.

Clients (if any)

If there are external clients, such as a company or organization that commissioned the project, they may stand to gain or lose based on the project's success or failure. Clients may benefit from increased brand recognition, a share of the revenue, or other strategic advantages if the platform is successful. However, they could suffer reputational damage or financial losses if the project is unsuccessful or if it raises ethical or legal concerns.

Ethical Considerations

Accessibility

Ensuring that the platform is accessible to users with disabilities is an important ethical consideration. Steps to address this issue include adherence to web accessibility guidelines, such

as those outlined by the Web Content Accessibility Guidelines (WCAG), and testing the platform with various accessibility tools to ensure it remains user-friendly for all users.

Privacy

Protecting user privacy is crucial, as the platform will access users' Steam libraries. The platform should adopt strict privacy policies, limit the amount of personal data collected, and use encryption to safeguard any stored data. Additionally, the platform must be transparent about its data handling practices and allow users to control the sharing of their information.

Legal Considerations

Copyrights

As the platform utilizes the Steam API, it is essential to comply with Steam's terms of service and API usage guidelines. Additionally, the use of game titles, images, or other copyrighted materials must be done in compliance with copyright laws and regulations. Obtaining necessary permissions from copyright holders is crucial to avoid infringement issues.

Permissions

If the platform incorporates third-party software or resources, it is vital to ensure that the necessary licenses and permissions are obtained. Compliance with the terms and conditions outlined by the respective software or resource providers is necessary to avoid potential legal conflicts.

Project Goals and Objectives

Goals	Objectives
● Provide an efficient tool for Steam users to compare their libraries with each other. ● Provide a clean user experience that works for both desktop and mobile users. ● Ensure user's privacy concerns and account permissions are explained.	● Have a successful integration with the Steam API that allows the users to log in to their account. ● Provide a room where users are able to join in through a code. ● Users are displayed with a list of shared games between them and other users in the room. ● Users are able to use specific filters to get a better list of recommended games to play.

Final Deliverables

Our final deliverable will be a fully fledged website where users can log in with the Steam API and then join/create a respective room where users can group up and compare games from their Steam libraries. They can apply filters to better curate their list of recommended games. The website will also be responsive in its design to work on mobile and desktop devices.

Approach/Methodology

This project will follow an Agile approach in terms of the software development process. The website will be developed by a team of developers with similar skill sets. There will be frequent meeting sessions where developers will collaborate and complete different tasks of the project. We will fill out our Pivotal Tracker with stories that can be completed by either one developer or more, depending on the points (difficulty) of the specific task. With this, we will be able to determine the velocity (weekly goals) of our development team and work accordingly with that measure to ensure we complete as much as we can between sprints. At the same time,

we will be able to manage and prioritize different tasks depending on the time frame we have for this project.

After researching other similar projects, we intend to ensure that this project will cover what those lack. More specifically, the privacy and security acknowledgement and user accessibility lacks in those websites, so this project will establish a sense of security and satisfying navigation patterns while using this website. In order to do this, the project will prioritize designing a simple and clear design that is easily understandable by users. This website will be formed by using a variety of software; HTML, CSS, ExpressJS, Adobe Illustrator, Adobe XD, and VS Code. More detailed information about the specific uses of each software is described below in the Resources Needed section.

Timeline/Resources

Detailed Timeline/Milestones

Timeline		
Milestone/Objectives	**Description**	**Week**
Create or Join rooms	When a user joins, they are able to either create or join a room	Week 1
Users can link Steam library	Users are able to login to their steam accounts to temporarily grant access to their libraries	Week 1
Users can compare libraries	Users in the room are able to compare their current libraries to see what games they have in common	Week 2
Users can receive recommendations	If the short survey is filled out then game recommendations are given to the users in the room	Week 3
Users can filter results	Users are able to filter the results for a more curated game list	Week 3

Resources Needed

- Pivotal Tracker for use in managing the Agile stories and the overall development of the project
- Adobe Illustrator to develop the visual components of the website and crucial visual elements like the websites icon and logo
- Adobe XD to develop working prototypes for the initial development stages

- VS Code to write the actual underlying code and host a development environment to test the in-progress project
- Languages: HTML/CSS/Javascript and ExpressJS to develop the entire full-stack website
    - Bootstrap and other front-end development tools like Google Fonts to ensure the front-end is easy to navigate and follows modern web standards
- Postman to test website API routes for crucial website functionality
- Selenium to test the full system functionality using automated browser testing code

Platform

Our platform of choice to complete this project will be Visual Studio Code. We chose this specific platform because VS Code makes it simple to manage files within the project. Especially when it comes to a project that implements full stack development. Between having .html files to .js files and more, all of the different files can be organized and displayed within the same page. Another useful feature that VS Code provides is Live Share, which allows a team of developers to work on the same project files at the same time. This will be useful to us when working in pair-programming teams on specific sections of the project to avoid merge conflicts. Finally, VS Code also provides a Live Server extension that allows developers to instantly view changes they make to their code come to life in a website browser. These are the main reasons why we chose to develop our project using the Visual Studio Code platform.

Risks and Dependencies

Risks

A risk for this project is the access and use of Steam's API which allows access to the user's library. This risk is a total reliance on the functionality of the API for the website to work correctly. A risk concerning the user is the use and security of their data, which will be removed once the session is over.

Dependencies

Our project will be entirely dependent on access to the Steam API, without that we would not be able to do a single thing with our website, reliable access to this API will be the cornerstone for our website's functionality. We will also be utilizing some web libraries like Bootstrap for our front-end that can eventually be deprecated or updated, but generally not on a timescale that should introduce major hurdles during our project's development.

Other dependencies of the project development itself is the development of a prototype for the website, as we are not able to enter full scale development without having finished some form of prototyping so that backend development can follow and support the frontend feature set.

Testing Plan

Our project will be tested via unit tests for individual smaller methods and via Postman for all larger API routes our website will create. We will also utilize full system tests with Selenium to ensure proper functionality. For user experience, we will be running the website and

its intended usage patterns through small focus groups of users (Steam PC gamers) in the target audience to ensure the overall experience is convenient and working as intended.

Team Members & Roles

- Warren Ngoun - Project Lead & Front-End Lead
    - Responsible for key visual elements and leading development of the user experience section of the website. Also responsible for general management of the project (like through tasks via Pivotal Tracker).
- Yukio Rivera - Quality Assurance and General Developer
    - Responsible for ensuring proper tests of software are developed and used.
- Jennah Yasin - Backend Developer: Database Developer
    - In control of developing the database that will be used for managing user's information and privacy.
- Luis Jimenez-Barrios - Backend Developer & API Management
    - Responsible for the use and security of data received from the API

References

Prusik, J. (n.d.). Get the value and size of your steam account. Steam Gauge. Retrieved May 5, 2023, from https://www.mysteamgauge.com/

Steam Companion: Steam Game Finder. Steamcompanion. (n.d.). Retrieved May 5, 2023, from https://steamcompanion.com/