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## CS 40700 - Senior Design Project

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# Mine

**A central media hub for all the things *you* love**

## PROBLEM STATEMENT

Today there are a plethora of online services which provide on-demand entertainment. With such a huge multitude of choices available, it can be difficult and time-consuming for an individual to search through them all to find a perfect fit. This is where Mine comes in. To make things easier for users, Mine provides a one-stop shop for searching for content a person could potentially be interested in. A user can simply specify a search term - whether it be a genre or a mood - and get related media available online.

## PROJECT OBJECTIVES

1. Design a web application that provides a comprehensive solution for searching for and discovering online content - through a vast variety of medium - whether it be written, such as books or news outlets, or audiovisual, like songs, TV shows, movies, videos, or even social - like events, posts, and communities.
2. Allow users to search for aforementioned online content on the basis of specific keywords, like or a mood or genre of their liking.
3. Allow users to login via their pre-existing accounts on popular online services like Google or Facebook.
4. Create a personalized dashboard for users to keep track of their previous searches and results.
5. Present users with other popular and trending searches.
6. Provide related content to the user on the based on their previous searches.

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## STAKEHOLDERS

- **Users:** Our users will be anyone who uses online services which provide on-demand entertainment.
- **Project Owners:** Utkarsh Agarwal, Shivangi Chand, Amol Moses Jha, Pooja Tewari
- **Project Manager:** Utkarsh Agarwal
- **Developers:** Utkarsh Agarwal, Shivangi Chand, Amol Moses Jha, Pooja Tewari
- **Development Manager:** Project Coordinator (TA) working with our team

## DELIVERABLES

1. A web application that allows users to search for media available online through a host of different providers offering a myriad of different services, simply by specifying search terms.
2. The web application will be implemented in disparate parts - namely, the frontend and the backend. The backend will be written in Java, and will utilize frameworks like Spring and Hibernate, while the frontend will employ technologies like HTML, CSS and Javascript, as well as the popular frontend framework React.
3. Persistent Application data will be stored and retrieved from a highly performant MySQL server.

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## CS 30700 PROJECTS

### Utkarsh Agarwal

My team developed a multiplayer game from scratch with a client-server architecture inspired by the board game Captain Sonar. We designed the server on Java with multi-threading for each player and implemented SQL database to store player profiles and stats. The frontend for the game was developed using Swing API. My team aimed to bring this classic board game to the forefront of the digital world. Through this project we were able to open Admiral Radar: A Space Expedition to a wider audience with more intuitive gameplay, and additional functionalities not possible on a physical board.

The project can be found here: <https://github.com/ByHr/AdmiralRadar>

### Amol Moses Jha

My team developed a cross-platform package manager supported by all unix systems. Since package management solutions are fragmented across unix systems, for example, different Linux distributions ship with different systems, which are widely incompatible with implementations on MacOS. This fragmentation leads to incompatibility issues as well as repeated effort for orchestrating large-scale system setups. My team aimed to solve this issue by creating a package manager which was not only compatible across all \*nix systems, but was also highly performant and capable.

The project can be found here: <https://github.com/parth-shel/ypac>

### Pooja Tewari & Shivangi Chand

Our team developed a web app that allows students to create and organize notebooks on their personal accounts in addition to allowing other students to subscribe to him/her, allowing them feedback to these notes. Notebooks are readily available across all web-enabled devices. Our web app has been inspired by OneNote and Google Drive, however, our app is different as it allows users to make the notebooks private/public, to give feedback on others' notebooks, and to be able to subscribe to each other.

The project can be found here:

- [https://github.com/sripathm22/Carnet\\_Client/tree/Sripath\\_branch](https://github.com/sripathm22/Carnet_Client/tree/Sripath_branch)
- [https://github.com/sripathm22/Carnet\\_API](https://github.com/sripathm22/Carnet_API)