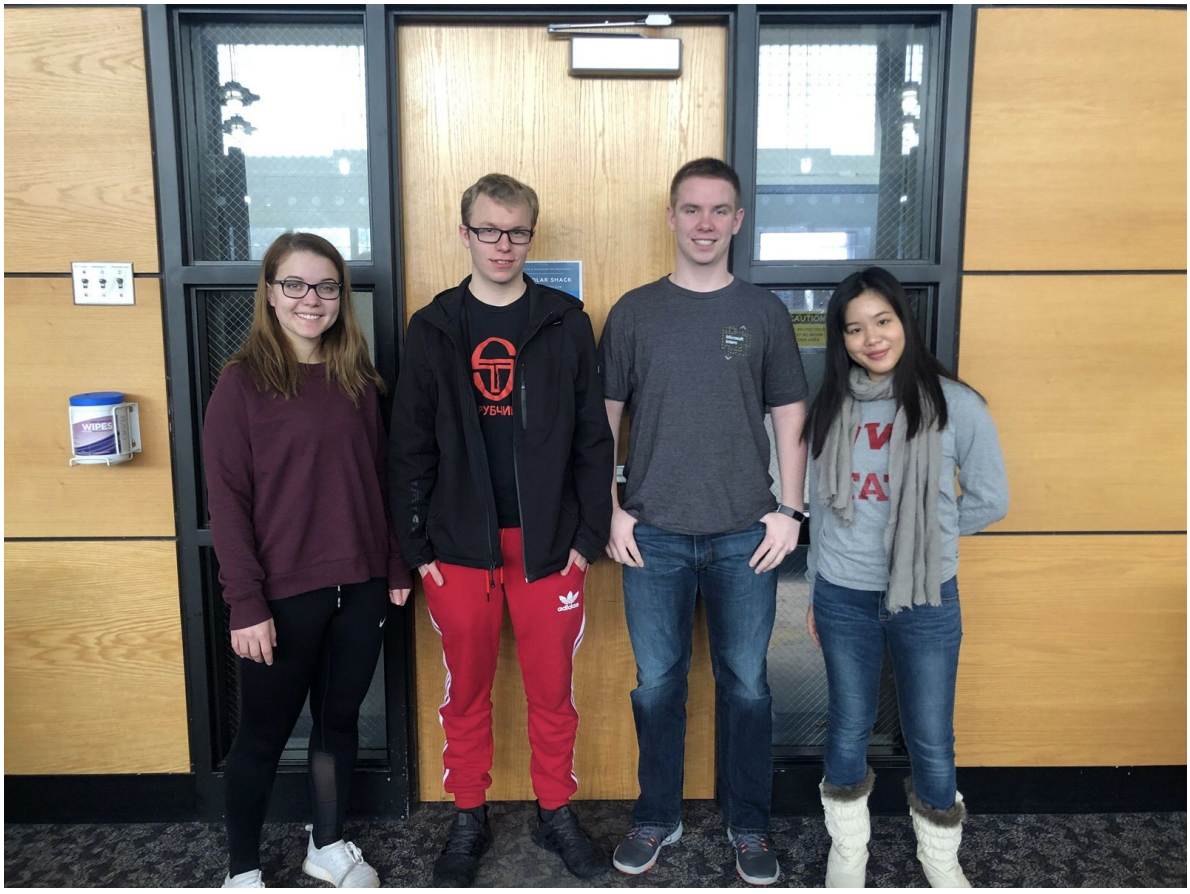
WIPES

Our Team Members

Golter, Anastasia: I'm a junior in my third year of Computer Engineering. Last semester, I took COM S 228 and CPR E 288 courses, so I would be considered a "newbie". I have experience coding in java, C, and verilog, and am excited to become more familiar with Android Studio. I am from Shakopee, Minnesota.

Sherburne, Aidan: Second year CPRE student coming right from 228 with previous coding experience in Java, C/C++, Python, PowerShell, and minimal experience in HTML and CSS. Strong background in cybersecurity and has contracted cybersecurity work to a handful law firms in the Twin Cities.

Bibus, Parker: I'm a Sophomore in my fourth semester coming right from 228. I have previous coding experience in Java, C/C++, C#, and Typescript, and experience in web development languages such as HTML and CSS. I gained this experience from personal projects, classes like 228 and 288, and a previous internship last summer at Microsoft in their Explore program.

Lee, Yung-Hsueh: Junior currently in sixth semester studying CPRE. Took 228 more than a semester ago, 288, and equivalent course to COM S 311 and CPRE 381 and Com S 486. 3 years of Java, C, verilog coding experience, and also with some experience in HTML/CSS, JavaScript, TCP/IP programming, and GUI design. Had an internship with Comba Telecom in summer 2018 to develop a Java program to update inventory data.

Project 1(greenlit): Catch the Cache(working title)

The goal of this project is to create a platform that allows for social interaction and entertainment between individuals from any location, through direct messages, group chat rooms, and caching. Our platform is unique from typical messaging and geo-caching applications, because we have more features including public and private groups as well as the ability to coordinate with others when going caching.

Our project will be accessed by users through a secure login page. From here, users will be able to make friends with whom they can chat with directly, or invite to a

group. Players will be able to join parties and work collaboratively with others near them. We will include location based challenges and hotspots that players can visit to earn achievements and points. More popular destinations could feature chat rooms or message boards where players can post messages and images during their visit.

To make these different parts, we will use the following languages and frameworks:

- Javascript
- Google maps API
- Android studio (Java)
- Spring Boot (Java)
- Default Java libraries
- MySQL databases

The parts that make this project complex are:

- Our team members' limited prior experience with projects this large, utilities such as Spring Boot and Android Studio (use of new libraries and frameworks)
- Maintain persistent connection to server, connect multiple users at once efficiently
- Using databases for messages, friends, locations, leaderboards/scores, etc.
- Tracking user location in real time and integrating that into the app and map
- Using Google Maps API and using JavaScript to overlay images and information onto the map
- Integrating basic checks to prevent "cheating" through location spoofing
- Per-user friends list, view online status of friends, ability to invite online friends to cache and private chat rooms

Project 2: SO*CY*ETY(working title)

The goal of this project is to create a platform that allows for social communication between individuals from any location, through direct messages, group chat rooms, and social games. Our platform is unique from typical messaging applications, because we have more features including public and private gaming as well as public and private chat communication rooms.

Our project will be accessed by users through a secure login page. From here, users will be able to make friends with whom they can chat with directly, or invite to a game or group chat. Users will also be able to randomly join game lobbies to meet new friends and play when their friends are offline. Our platform will include different casino style gaming options such as black jack, poker, and other card games. Players will be able to compete amongst friends and compare scores among themselves, on a local level, and even on a global leaderboard.

To make these different parts, we will use the following languages and frameworks:

- Android studio (Java)
- Spring Boot (Java)
- Default Java libraries
- MySQL database

The parts that make this project complex are:

- Our team members' limited prior experience with projects this large, utilities such as Spring Boot and Android Studio (use of new libraries and frameworks)
- Maintain persistent connection to server, connect multiple users at once efficiently
- Public vs private chats and game rooms (create public rooms anyone can see and join, as well as private or invite only rooms)
- Per-user friends list, view online status of friends, ability to invite online friends to games and private chat rooms
- Using databases for messages, friends, leaderboards/scores, etc.