

# Presentation 1

CPSC 481 - T04 Group 1

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Who We Are

# University of Calgary

- **Size**

- Staff (academic and non-academic): 4750
- Students
  - Currently enrolled: 37 000 +
  - Alumni: 217 000 +

- **Philosophy and Vision**

- Create an engaging learning and social environment that fosters growth and community
- World-class research and innovation to promote societal growth



**UNIVERSITY OF  
CALGARY**

# What's the Problem?



- Lack of centralized official system provided by the University of Calgary
- Students resort to multiple platforms for discussions and finding out about events



**eventbrite**

# What are the constraints you're working with?



1. Privacy/Security
2. Responsive Design and Accessibility
3. Respect University Culture and Rules
4. Scalability
5. Time and Resources

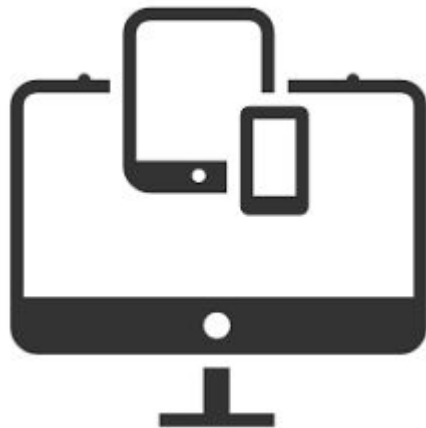
# Privacy/Security

- Data privacy
  - Sensitive user information must remain confidential
  - System must be designed to prevent a data breach
- Proper user authentication and security
  - Encrypt data
    - Password hashing and reset mechanisms
  - Authentication
    - Multi-factor authentication, session management
  - Role based access control
  - Secure communication



# Responsive Design and Accessibility

- Device agnostic
  - Mobile phones, tablets, laptops, desktops
- Audio and Visual Assistive Technology
  - Screen reading
  - Captions for videos
  - Descriptions for audio



# Respect University Culture and Rules

- Adherence to University Policies
  - User conduct and content guidelines
  - Privacy and data security policies
  - Academic integrity policies
- Cultural Sensitivity, Diversity and Inclusion
  - Promote diversity and inclusion for all members
- Campus Resource Integration





# Scalability

- Due to the large numbers of potential users (students, alumni etc.) the application must scale well!
- Designed in a way that can handle:
  - Increased spikes of traffic
  - Continuous increased levels of traffic
- We must ensure:
  - Efficient data management and consistency
  - Low load times
  - High fault tolerance
  - Designed for growth



# Time and Resources

- Designed in a way that is:
  - Easily maintainable
    - Easy to release updates
    - Easy to identify/fix bugs and issues
    - Extensible
- Most development costs go towards software **maintenance!**
- Cost Constraints
  - Infrastructure/cloud costs must align with number of users
  - Auto-scaling mechanisms to scale cost as traffic increases/decreases



# How did we do our research?



- As university students ourselves, we were able to easily personally interview many potential users for our application (direct and mutual friends)
- Combining this with personal experience, we were able to identify the pain points of the existing solution and address those in our product.

# Summary of Previous Slides and Context



- University of Calgary is a well-established institution with a **lot of members**
  - Staff
  - Students
  - Alumni
- Mission to provide an **engaging educational environment** that promotes growth and fosters innovation
- **Lack of an official unified platform** that promotes networking
- **Centralized social network** to address this problem
- Build a well-designed and usable product **given various constraints**

# Brief User List



## Core Users

- University Students
- Student Clubs & Societies

## Secondary Users

- Professors
- Teaching Assistants
- University Alumni
- University admins

# User 1



Gale Smith

20 years old. International student studying Computer Science at the University of Calgary. Moved from Los Angeles, USA 2 years ago for university. Member of tech and cultural clubs at UofC.

Part of the most common user group.

Already familiar with well known social media applications.

# User 2



Usharab Khan

Director of Events at the Pakistani Students' Society at UofC. Has been with the club for over 2 years.

Manages the planning, organization and promotion of the clubs' events amongst university students.

Part of a common user group.

Already familiar with well known social media applications.

# Tasks



## List of Tasks Identified

- Creating groups for users to connect through common interests
- Adding comments, experiences under a post
- Searching for groups that the one is interested in
- Posting public events for other people to join
- Communicating with individuals via direct messaging
- Texting group chats about mutual interests



# Task 1

Josh, a software engineering student at the University of Calgary, excited at the thought of playing Call of Duty, is passionate about FPS and looking to find like-minded individuals. In order to do so, he opens the mobile application designed for the social network to create and manage groups within the app. He navigates to the groups tab and fills in the name of the group, the description of the group and clicks submit to create the group. Josh does this in the evening right before playing a game as creating a group and setting it up takes approximately 5 - 10 mins, and can be completed during short sessions.



# Task 2



Abbey, a psychology student at the University of Calgary, is an avid fan of mystery novels and is fond of discussing theories with fellow readers. She opens the mobile app designed for social networking while relaxing in her dorm seeking a cozy way to connect with her peers. She clicks into the group chat for mystery novel readers and sends a message asking what everyone has been reading recently. The responses soon start flooding in sparking a lively conversation about their mutual interests. Abbey is doing this task in the late afternoon after her classes, anticipating that composing and sending the message will take about 5 mins.

# Requirements

## Core Users

- Students
- Student Clubs & Societies

## Secondary Users

- Alumni



Must Include	Should Include	Might Include	Exclude
Creating a user profile	Posting public events for other users to join	Direct Messaging functionality	AI Recommendations for groups to join
Search for and join a group to discuss about common interests	Adding comments or experiences	Edit User Profile	Promotions/ads about events
Creating groups for users to connect through common interests	Edit Event Details/Edit Post details	Like System for Posts/Threads	AI Chatbot

# To Summarize

## The Problem

- There is no official centralized system for networking, meeting new people, and advertising/sharing events
- Students may utilize several different platforms which can be a hassle to keep track of



eventbrite



## Our Solution

- Provide a unified network where users, such as clubs or students, can find and communicate with others sharing common interests and post event listings for others to attend
- Accommodate for both students and clubs to make posts
- Tasks and requirements are prioritized based on how frequently we think they will be utilized

# Thank you! Questions?

