

SK Trails

Dmytro Stepaniuk (200426341)

Grant Zhao (200484531)

Kamran Aqeel (200482882)

Week 12
November 26, 2024

Software Engineering
Management (ENSE 374)



University
of Regina

Go far, *Together*.

Agenda

- Introduction
- Problem Definition
- Design Requirements
- Solutions (1st, 2nd and final solution)
- Project Management
- Conclusion and Future Work

**Kizaru on his way to
maintain admirals'
agenda**



University
of
Regina

Go far, together.

Introduction

Background Information

The project aims to design a website showcasing Saskatchewan's hiking trails, addressing the surge in outdoor leisure interest after the COVID-19 pandemic. Saskatchewan's diverse trails and scenic landscapes make it an ideal focus, meeting the growing demand for accessible and reliable trail information.

Rationale

This website fulfills the need for a user-friendly platform offering detailed trail information, including evaluations, ratings, and user experiences. Features like filters for time, distance, and nearby amenities help users find trails that suit their preferences. Current platforms lack a localized and intuitive design tailored to Saskatchewan's hiking community.

Using **HTML**, **CSS**, **JavaScript**, and **MongoDB** the site will deliver a responsive, interactive design that caters to desktop and mobile users, enhancing usability and enriching hiking experiences.

Problem Definition

- No centralized platform for hiking trails in Saskatchewan
- Difficulty matching trails to preferences and skill levels
- Limited access to reliable trail information
- Uninformed choices due to lack of trail details
- Inadequate information sharing
- Need to improve the hiking experience
- Promote healthier lifestyles



HAVE A HAPPY
HIKING



University
of
Regina

Go far, together.

Design Requirements

- Goals

- The SK Trails project aims to create an intuitive platform for hikers in Saskatchewan to find suitable trails based on their skill levels and preferences. It provides detailed information about trails, enhancing user engagement and promoting outdoor activity, environmental awareness, and healthier lifestyles.

- Objectives

- Develop a user-friendly interface which will allow users to browse and filter hiking trails of their choice by region, duration, length, terrain, difficulty and user ratings
- Complete project planning documentation by the deadlines
- Design the MVP using a programming environment combination of HTML, CSS/Bootstrap, JavaScript, NoSQL, Node.js, etc

DESIGN CONSTRAINTS

Problem 1: Economic Factors

Problem 2: Sustainability and Environmental Factors

Problem 4: Regulatory Compliance (Security and Access)

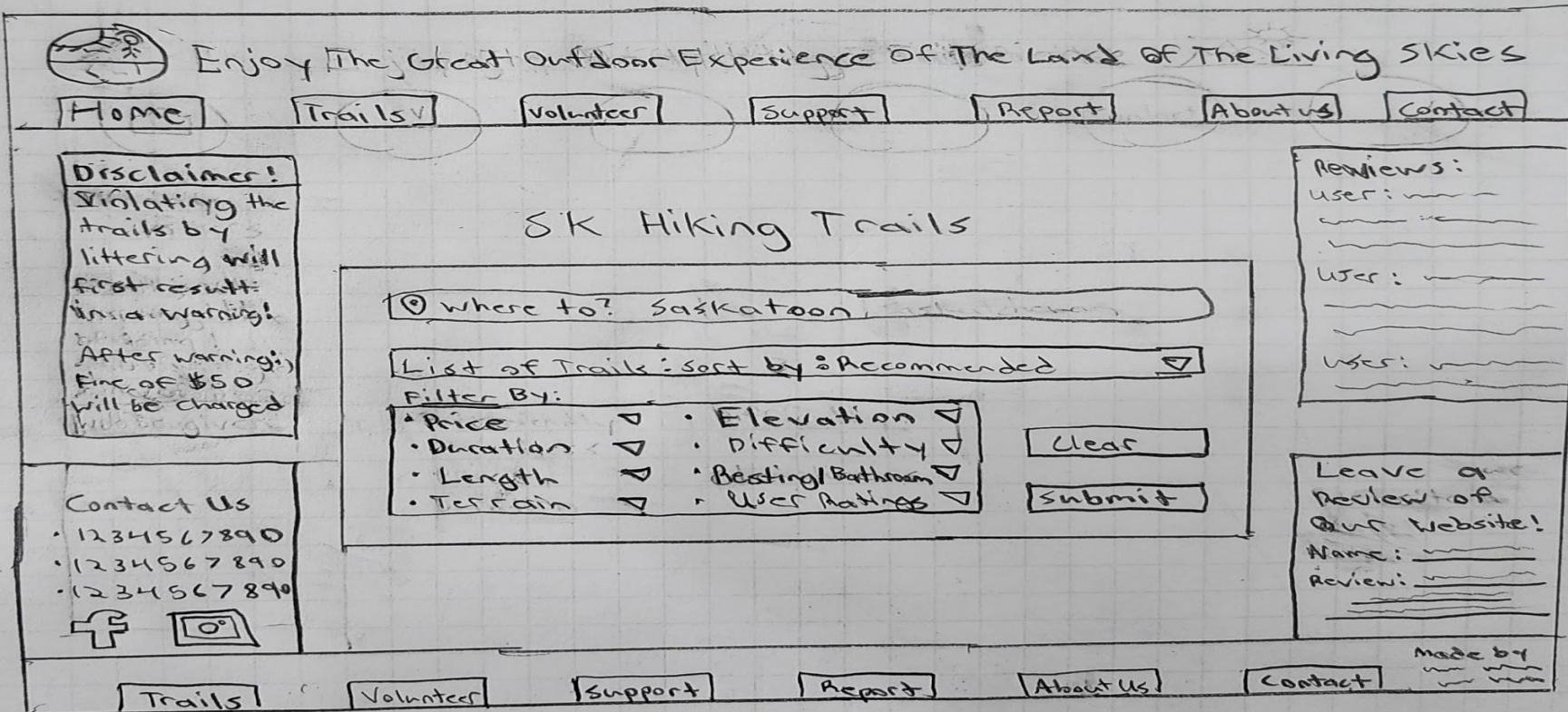
Problem 5: Reliability



University
of Regina

Go far, together.

Solutions: Design 1

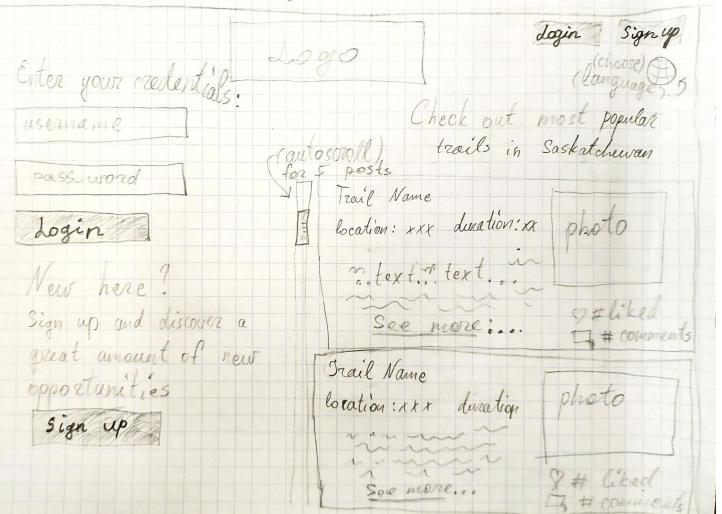


University
of
Regina

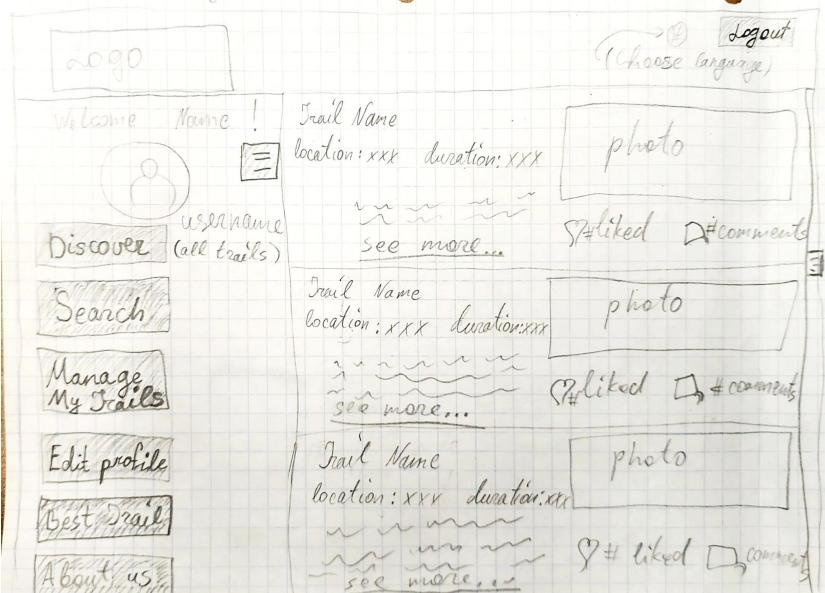
Go far, together.

Solutions: Design 2

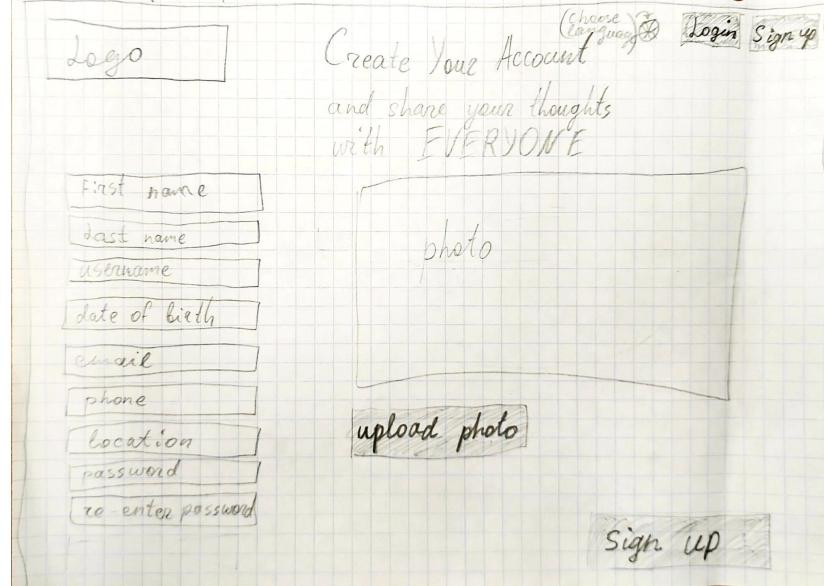
Main Page (before login)



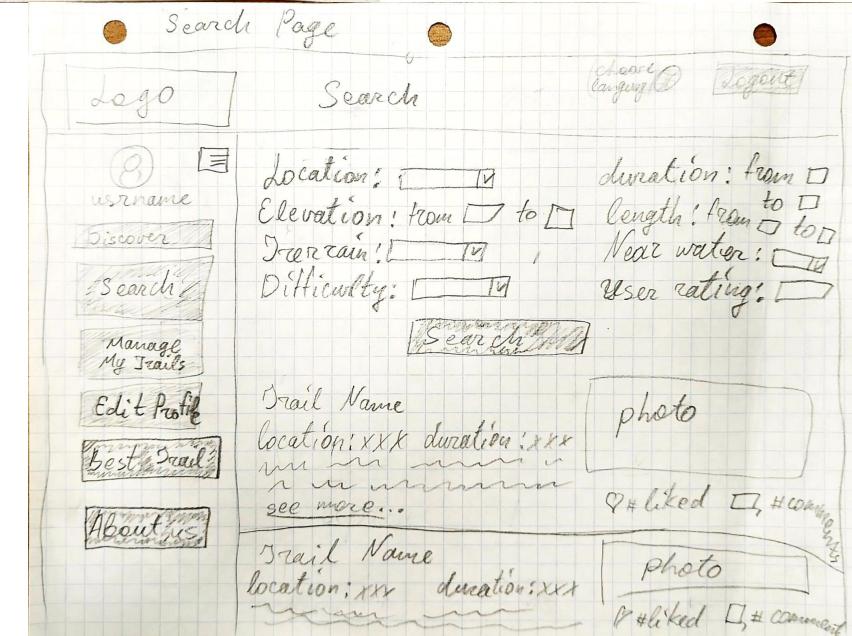
Main Page (after login)



Sign up page

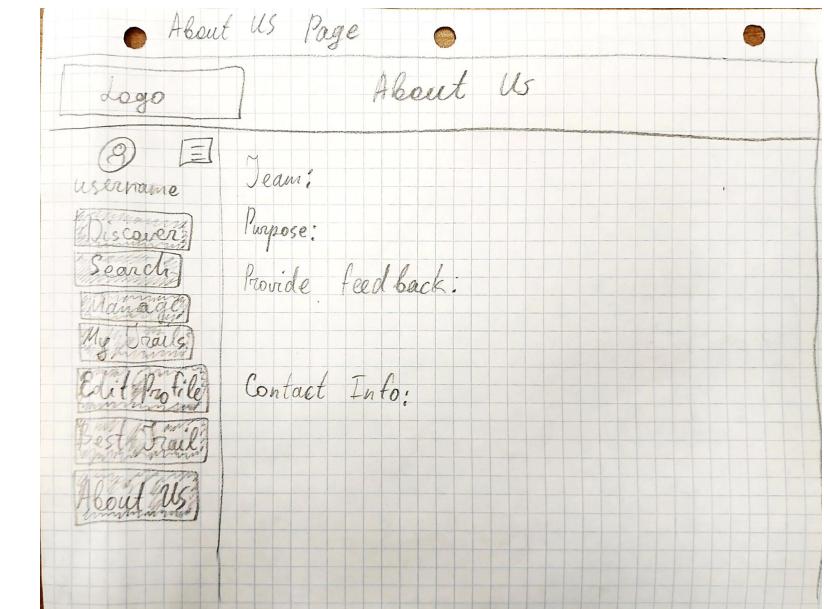
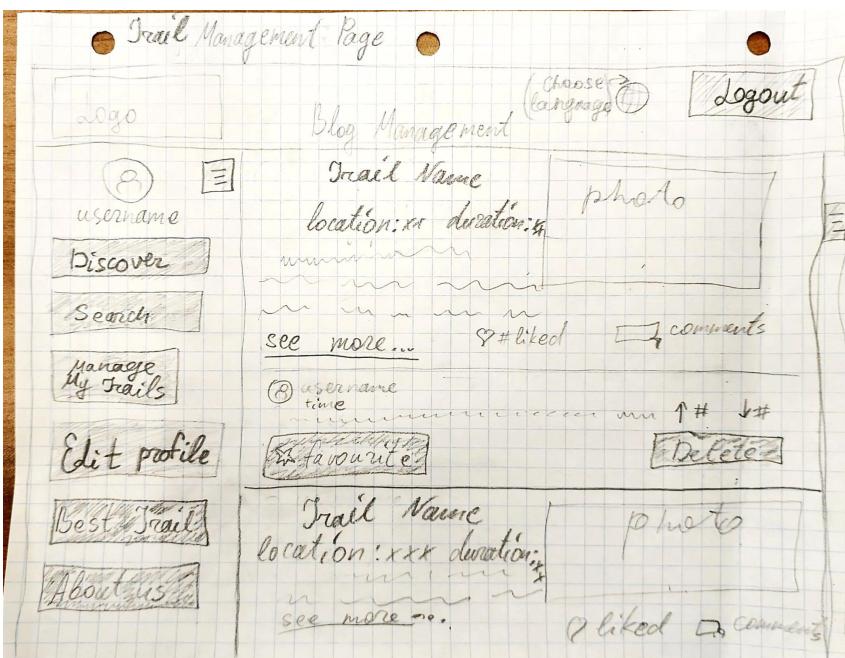
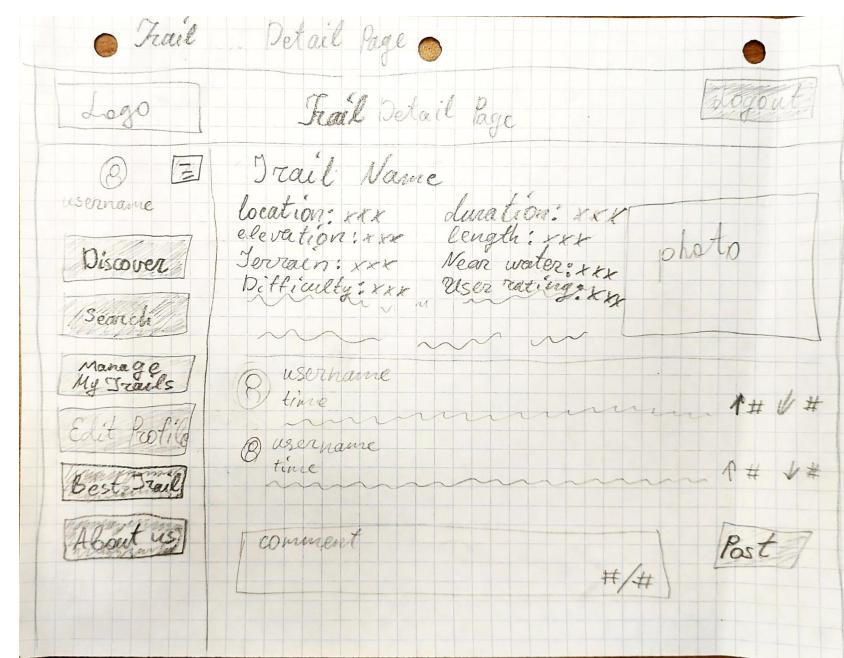
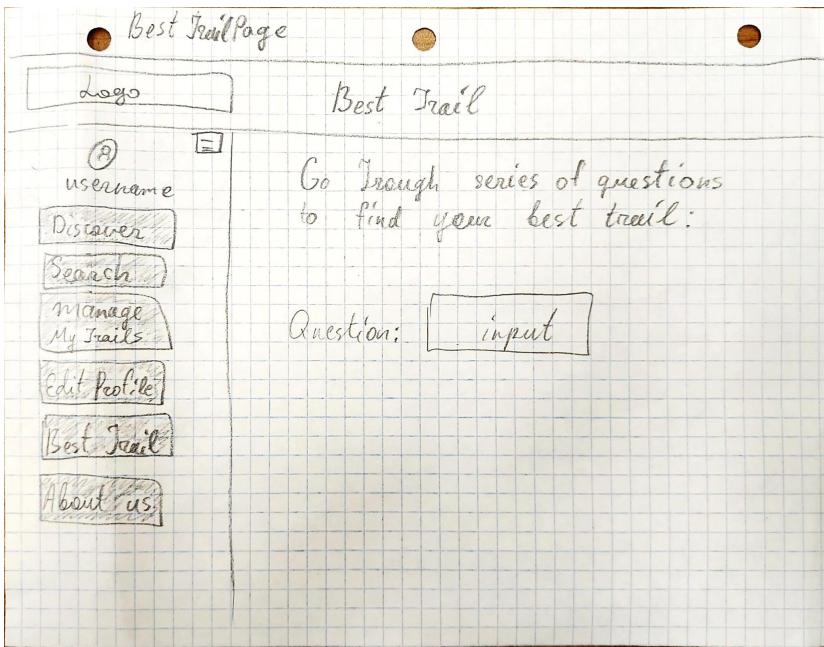


Search Page



University
of
Regina

Go far, together.



University
of
Regina

Go far, together.

Solutions: Final Design

Search Trails

SK Trails

SEARCH FOR HIKING TRAILS

Signup

Login

USERNAME

Search Location: Enter a hiking trail in Saskatchewan...

CHECK OUT THE MOST POPULAR TRAILS:



CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments 

CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments 

CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments 

Discover

Search

Manage My Trails

Edit Profile

About Us

Search Trail by Name

Discover trails

Discover

SK Trails

Signup

Login

USERNAME

DISCLAIMER:
Welcome! By using this website, you agree to take personal responsibility for your safety and actions. Please be mindful of natural hazards such as uneven terrain.

CHECK OUT THE MOST POPULAR TRAILS:



CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments 

CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments 

CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments 

Discover

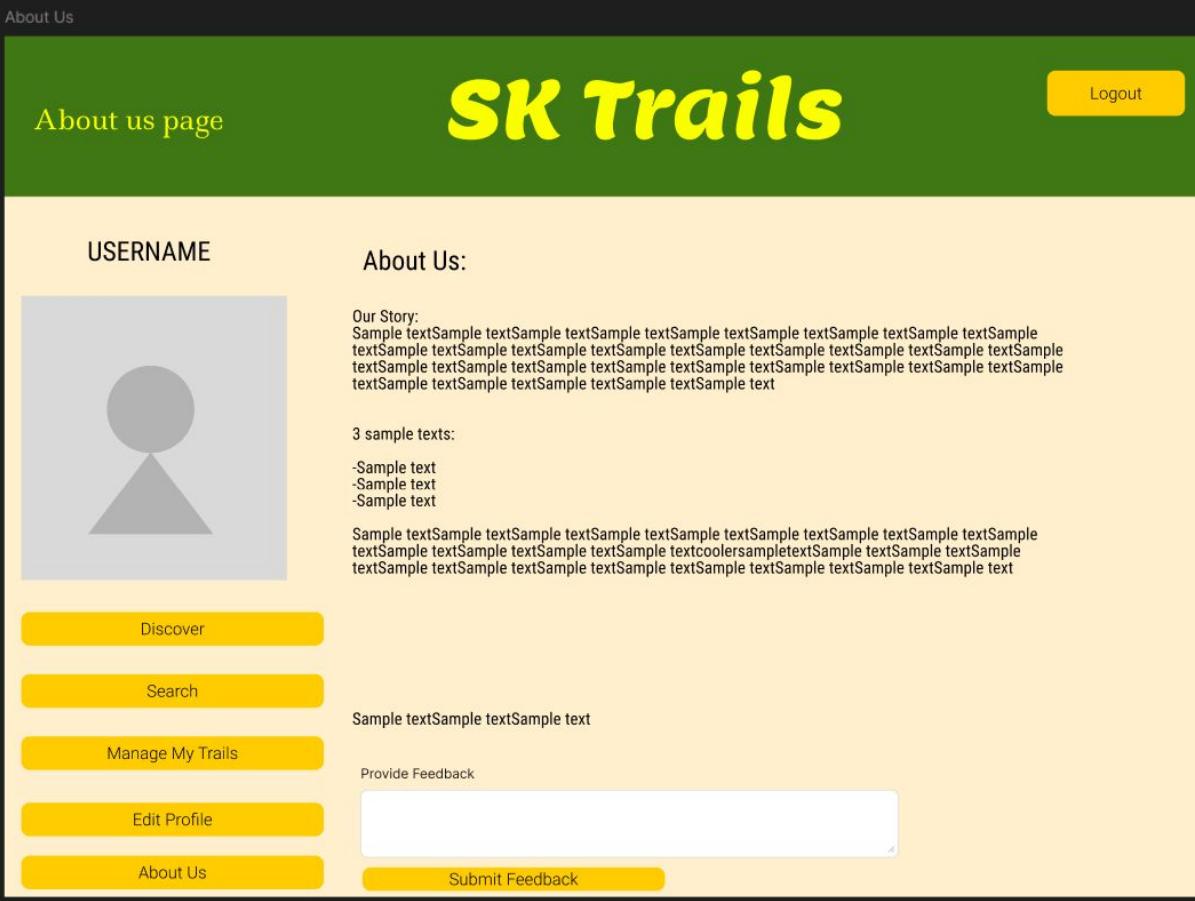
Search

Manage My Trails

Edit Profile

About Us

About us page



The screenshot shows the SK Trails website's "About Us" page. At the top, there is a green header bar with the "SK Trails" logo in yellow. Below the header, the page has a light beige background. On the left side, there is a large placeholder for a user profile picture, which is currently a gray silhouette of a person. To the right of this placeholder, the word "USERNAME" is displayed above a text input field. Below the input field, there is a section titled "About Us:" containing sample text. Further down, there are several buttons labeled "Discover", "Search", "Manage My Trails", "Edit Profile", and "About Us". A feedback form is also present, consisting of a text input field and a "Submit Feedback" button.

About Us

SK Trails

Logout

USERNAME

About Us:

Our Story:
Sample textSample text

3 sample texts:
-Sample text
-Sample text
-Sample text

Sample textSample text

Discover

Search

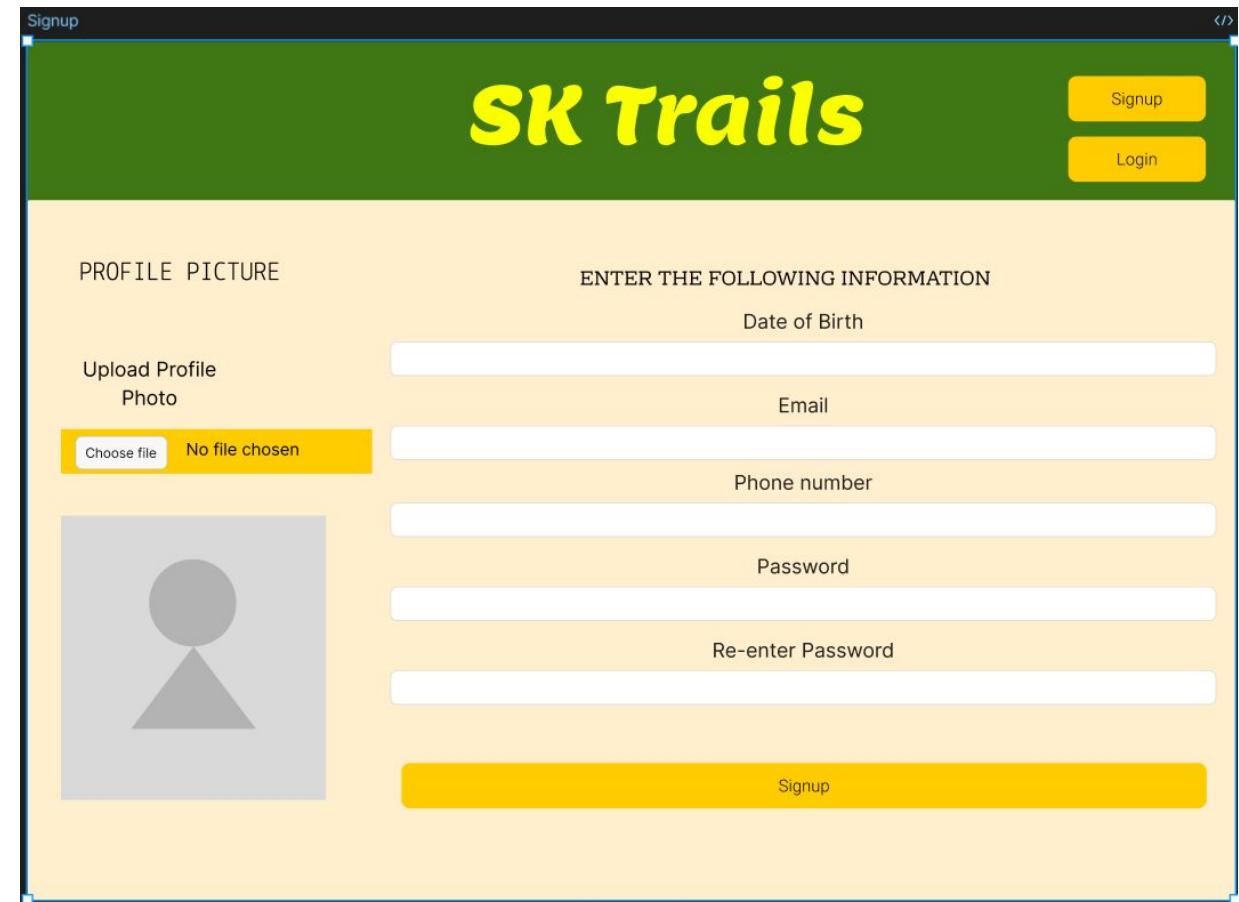
Manage My Trails

Edit Profile

About Us

Submit Feedback

Signup page



The screenshot shows the SK Trails website's "Signup" page. The page has a light beige background with a dark green header bar at the top. The header bar features the "SK Trails" logo in yellow and two buttons: "Signup" and "Login". Below the header, there is a large placeholder for a user profile picture, which is currently a gray silhouette of a person. To the right of this placeholder, there is a section titled "ENTER THE FOLLOWING INFORMATION" containing several input fields. These fields include "Date of Birth", "Email", "Phone number", "Password", and "Re-enter Password". Above these input fields, there is a section titled "PROFILE PICTURE" with a "Upload Profile Photo" button and a file selection input field showing "Choose file No file chosen". At the bottom right of the page, there is a large yellow "Signup" button.

Signup

SK Trails

Signup

Login

PROFILE PICTURE

ENTER THE FOLLOWING INFORMATION

Date of Birth

Email

Phone number

Password

Re-enter Password

Upload Profile Photo

Choose file No file chosen

Signup



University
of
Regina

Go far, together.

Login page

Login

SK Trails

Signup

Login

LOGIN

CHECK OUT THE MOST POPULAR TRAILS:

Email

Password

Login

New Here?

Signup

CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments

image

CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments

image

CampfireCrafter
MARCH 22 2024 23:31

Sample Title

image



University
of
Regina

Go far, together.

Post management page



[Signup](#)

[Login](#)

USERNAME

CHECK OUT THE MOST POPULAR TRAILS:



CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments

[image](#)

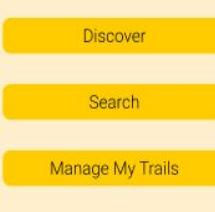
[Discover](#)

[Search](#)

[Manage My Trails](#)

[Edit Profile](#)

[About Us](#)



CampfireCrafter
MARCH 22 2024 23:31

Sample Title

sample text sample text sample text sample text sample text
sample text sample text sample text sample text sample text

XXX likes ## comments

[image](#)



CampfireCrafter
MARCH 22 2024 23:31

Sample Title

Post page

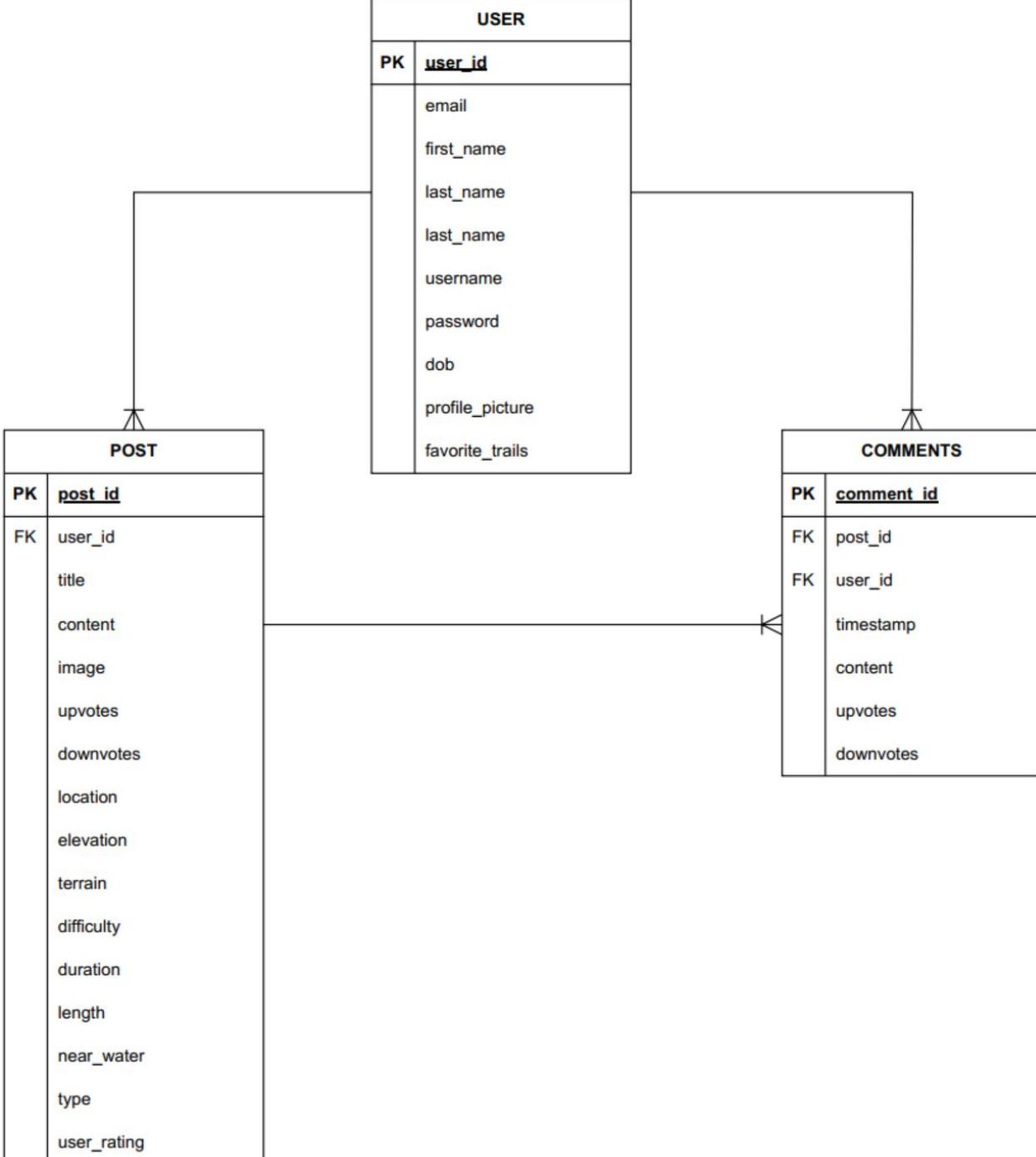
Solution Comparison Chart

| Solution 1 | Solution 2 |
|---|--|
| <p>Navigation Bar: Quick access to important sections such as Home, Trails, Volunteer, Support, etc.</p> <p>Disclaimer Section: Promotes environmental responsibility by informing users about trail littering and potential fines.</p> <p>Search and Filter Options: Users can search and filter trails by various factors like Price, Duration, Length, Terrain, Difficulty, etc.</p> <p>Review Section: Encourages user interaction by allowing them to read and leave reviews about trails.</p> <p>Contact Information and Social Media Links: Provides easy access to connect with the team and stay informed through social media.</p> <p>Footer Links: Repeats navigation links for improved usability.</p> <p>User Benefits: Emphasizes the use of detailed search filters and user feedback to improve the hiking experience.</p> | <p>Login/Sign-Up Pages: Users have the option to log in or sign up to customize their experience, with a sneak peek of popular trails to attract new users.</p> <p>Trail Feed and Community Interaction: Users can view trails with likes and comments, offering community insights before heading out.</p> <p>Advanced Search and Filters: Narrow down trails by location, elevation, terrain, etc., with a personalized quiz to suggest the ideal trail.</p> <p>Trail Detail Page: Provides comprehensive information on each trail, including comments, likes, and feedback from the community.</p> <p>Trail Management Page: Users can create personal lists and bookmark favorite trails, adding organizational value.</p> <p>About Us Page: Introduces the team to add a personal touch and promote transparency</p> <p>User Benefits: Highlights community engagement, personalized recommendations, and features like trail management to improve user retention.</p> |

Key Differences

- **Personalization:** Design 2 places a greater emphasis on personalization through features such as a login system, trail feed, and quiz-like feature, while Design 1 focuses more on search filters and reviews.
- **Community Engagement:** Design 2 provides a more interactive community experience with features like likes, comments, and personalized suggestions, whereas Design 1 offers a review system and social media links.
- **Trail Management:** Design 2 includes a dedicated trail management page for users to track their favorite trails, a feature that is missing in Design 1.
- **Search Page:** Final design does not have filter option like design 1 and 2.

Database Structure





MVPs for SK Trails



HeLo



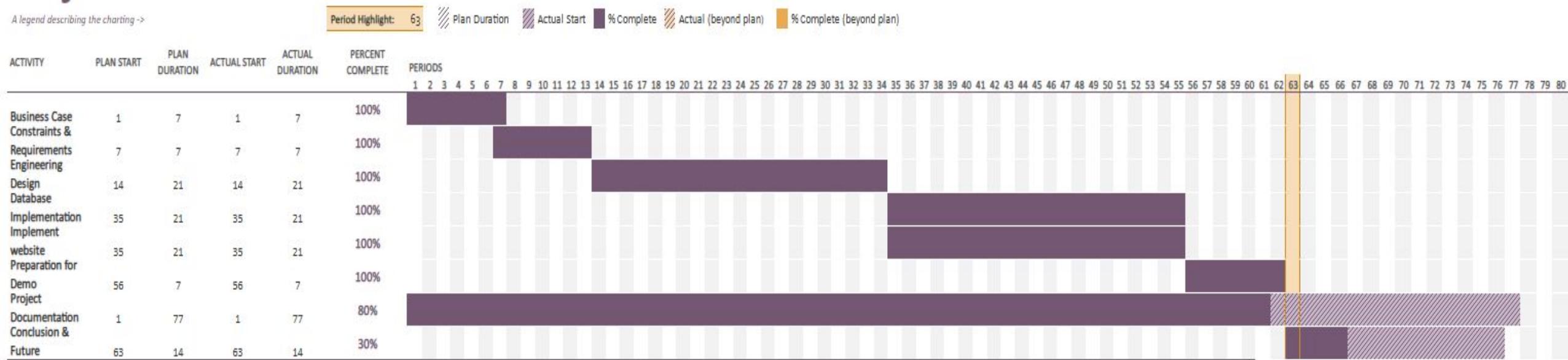
University
of
Regina

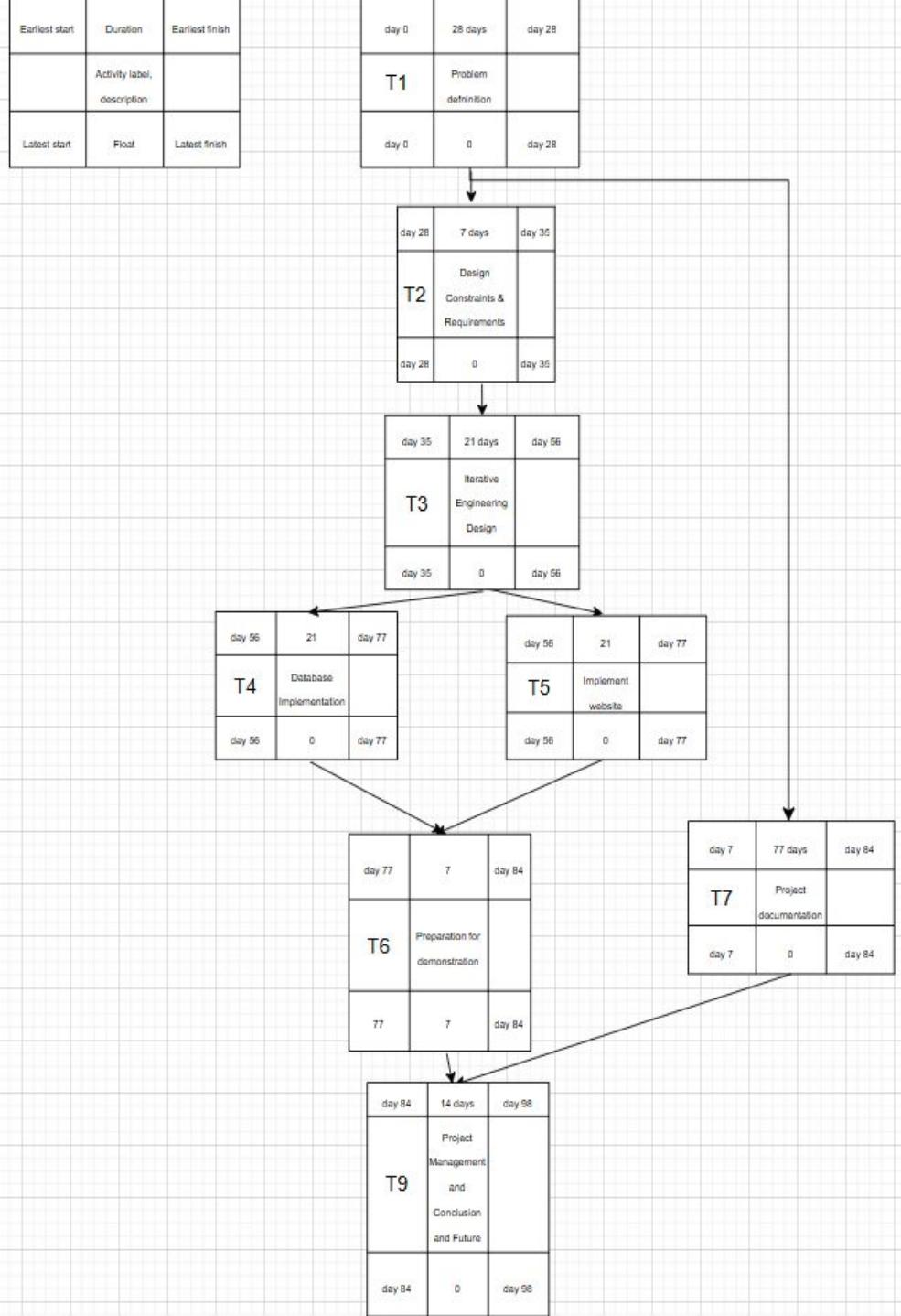
Go far, together.

Project Management

- Describe a Gantt chart representing the progress of your work.

Project Planner





Critical Path Analysis

The tasks are similar to...

DEMO TIME

When project is not ready
but the client wants a demo



University
of
Regina

Go far, together.

Conclusion and Future Work

All things considered, we would enhance our trails website by adding a filtering option that would let users choose the type of trail they want to hike on and then submit a filter request to show the trails that best suit their interests. We also plan to provide a safer user experience, by enhancing the security of user data, such as their login credentials.



University
of
Regina

Go far, *together.*

Questions & Answers



University
of Regina

Go far, together.