

BC CANCER PROJECT PROPOSAL

CS5500 - Group 4

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Project Overview

Objective

- Enhance BC Cancer's donor data management by implementing a **modern, smart donor management system**.
- Enhance **coordination** among event managers, fundraisers, and coordinators.
- Improve **operational efficiency and effectiveness** in donor management and event planning.

Deliverables

- Wireframe prototype and project proposal
- A comprehensive platform for managing the events and tasks



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01. Problem Statement

Context, problem statement
and target audience



01 Problem Statement



Context

- Donor contributions are **essential** in supporting BC Cancer's efforts in cancer research and patient care.
- Current management methods are **inefficient and prone to errors**.
- Inefficient management **hampers fundraising efforts and staff coordination**.



Problem

- Lack of a centralized, **smart** donor management system.
- Challenges in coordinating events and **tracking** donor interactions.
- Inefficiencies leading to **potential loss of donations** and engagement opportunities.

TARGET AUDIENCE

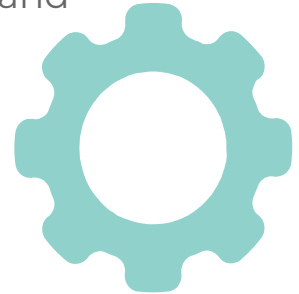
- **Event managers** at BC Cancer.
- **Fundraisers and Coordinators.**
- **Donors** who will benefit from improved engagement.
- Ultimately, **cancer patients and research initiatives** supported by **increased funding.**



02.

Potential Solutions

Exploring Three Solutions and
Selecting the Best Fit



POTENTIAL SOLUTION - A

Enhance Existing Spreadsheets

Tools Involved:

- Excel, PowerBI

Pros:

- Quickly modify pre-existing files.
- Easy for users to get started without a steep learning curve.

Cons:

- Limited scalability.
- Unstructured and inconsistent file management.

POTENTIAL SOLUTION - B

Leverage Real-time Editing with donor system

- Allows multiple users to edit the data at the same time
- Implements CRUD on donor system

Tools Involved:

- ELK

Pros:

- Edit the data more efficiently

Cons:

- Requires additional developers for post-operation

POTENTIAL SOLUTION - C

Develop a Tailored Spreadsheet Management System

Tools Involved:

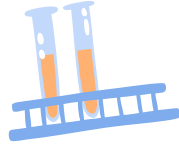
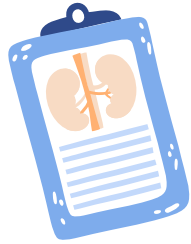
- React; Node.js; MySQL

Pros:

- Can be tailored to specific user needs, offering advanced tools for data analysis and reporting.

Cons:

- Longer implementation time comparing with solution A
- Requires training for users to adapt to the new system.



03. Wireframe Prototype

Process Flow and Interface Sketches



Key Features

Add New Event



Generate a attendee list
in a convenient and
effective way

Event Editing Workbench



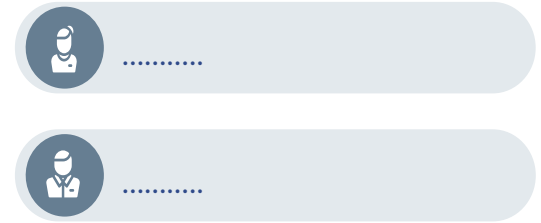
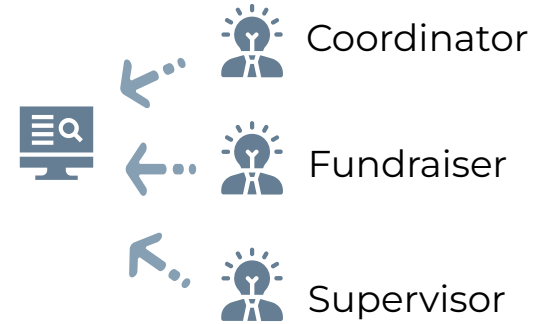
Avoid the troubles of
using traditional Excel
worksheets

View Event Details



Record the process of
decision making

PROCESS FLOW OF SYSTEM



All the edit history and reasons for editing will be recorded.


User Interface - Dashboard

Add Event

Edit Event

View Events

Users



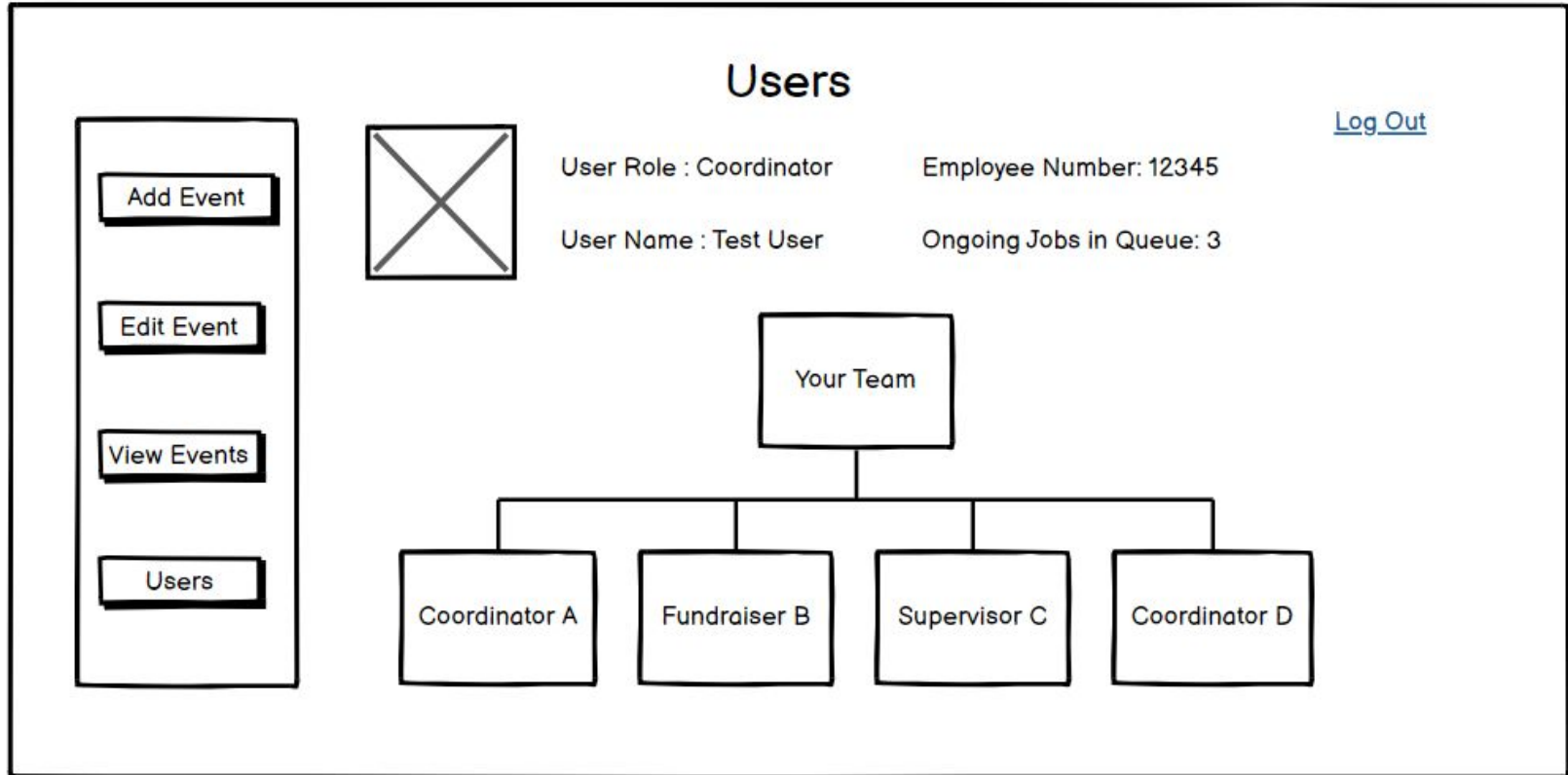
User Role : CoordinatorEmployee Number: 12345

User Name : Test UserOngoing Jobs in Queue: 3

Ongoing Jobs

ID	Name	Progress Status
0001	2024 Porche Pink Parade Vancouver	<input type="checkbox"/>
0002	The Multiple Myeloma March	<input type="checkbox"/>
0003	Royal Victoria Marathon	<input type="checkbox"/>

User Interface - Users



User Interface - Add Event

Add an Event

Event Name

Event ID

20240001

Event Size

Location

☐ All

Event Date

Event Topic

☐ Select All

☐ Unselect All

Name ▲	Location	Total Pledge	Contact Information	Related
Apple	North Vancouver	100	121212	
Banana	South Vancouver	200	342424	Apple
Orange	Victoria	300	393939	
Grapes	Burnaby	400	10101010	

Generate a List

User Interface - Edit Event

Edit an Event

Event ID

Event Name

Add Donors

Show Edit History

Name ▲	Location	Total Pledge	Contact Information	Related	
Apple	North Vancouver	100	121212		< Delete
Banana	South Vancouver	200	342424	Apple	< Delete
Orange	Victoria	300	393939		< Delete
Grapes	Burnaby	400	10101010		< Delete

Enter the reasons for editing

Submit

Approve the Event

Cancel the Event

User Interface - Export Lists

Event Sub-lists

Event ID

Notification Method

Go

Name ▲	Location	Total Pledge	Contact Information	Related
Apple	North Vancouver	100	121212	Apple
Banana	South Vancouver	200	342424	
Orange	Victoria	300	393939	
Grapes	Burnaby	400	10101010	

Generate

Cancel



04.

TECH STACK & CHALLENGES

Technologies involved, strategies and uncertainties

TECH STACK



❖ It enables dynamic, responsive interfaces with reusable components.

TECH STACK

- ❖ Integrate smoothly with the rest of our stack
- ❖ Efficiently manage routing and server-side logic, keeping everything streamlined



- ❖ Relational database that is space-saving, organized, and scalable for our needs.

TECH STACK

Collaboration

- ❖ **GitHub** for version control and collaboration on the majority of our codebase
- ❖ **Google Colab** as a shared environment for research and testing scripts

Testing

- ❖ **Jest** for comprehensive testing
- ❖ **Postman** ensures smooth API communication between frontend and backend



DEV TOOLS

- ❑ Google Colab, GitHub
- ❑ TS-Jest, Postman

TECH STACK



FRONT END

- ❑ React.js



BACK END

- ❑ Node.js
- ❑ Express
- ❑ MySQL



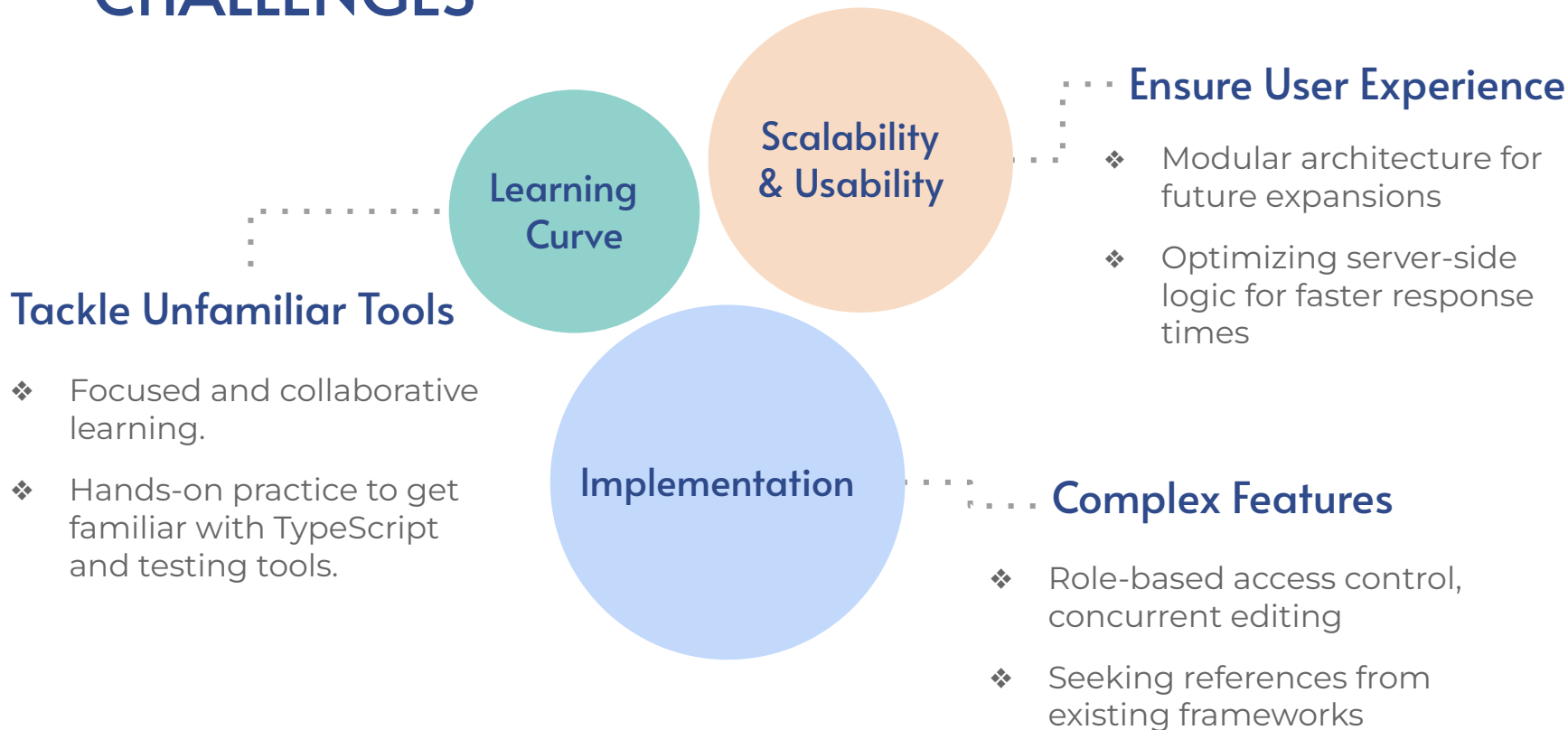
DEV TOOLS

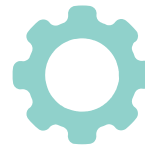
- ❑ Google Colab, GitHub
- ❑ ts-Jest, Postman



TypeScript as our main language: better code **quality**, static **typing**, **maintainability**

CHALLENGES





05. FUTURE WORK

Our plans and future steps



Development plan



Currently our development plan is to separate two different groups: one for backend and one for front end.



06.

CONCLUSION





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THANK
YOU !