

CSC 375 – Introduction to Systems Analysis

UI Prototype Document

Project Title	Reporting Pipeline Modernization
Team Members (Names)	Brian Pham, Xiangyu Yang, Wenchu Kan, Yilun Shi, Nitin Ruhil, Justin Chanhom
Group #	18

UI Models

Use Case 1: Create a new data submission (with validation)

Login Screen -> Submission Form Screen (Team-Restricted) -> Submission Form Screen (Team-Restricted) [with validation errors if any] -> Submission Form Screen (Team-Restricted) [success modal]

Use Case 2: Create a new data collection point

Login Screen -> Admin Dashboard -> Team Management Screen -> Create Collection Point Screen -> Team Management Screen [with new collection point visible]

Use Case 3: Send submitted data to Data Warehouse

Login Screen -> Admin Dashboard -> Team Management Screen -> Collection Review Dashboard -> Warehouse Connector Configuration Screen [if needed] -> Data Mapping Screen [if needed] -> Collection Review Dashboard [send to warehouse] -> Collection Review Dashboard [archived status]

Use Case 4: Authentication for Admin and create their team

Login Screen -> Admin Dashboard -> Admin Dashboard [create team action] -> Team Management Screen [new team]

Use Case 5: Generate and Download Reports

Login Screen -> Admin Dashboard -> Reports Screen -> Reports Screen [with download link]

Use Case 6: Invite team members (implicit in Use Case 4)

Login Screen -> Admin Dashboard -> Team Management Screen -> Team Management Screen [invitation modal] -> Team Management Screen [updated members list]

Screens

1. Login Screen



2. Admin Dashboard

Admin Dashboard

Teams

Global Stats

5401 Total Submissions

249 Total Collection Points

271 Active Members

Team 1  13
2 Collection Points
5 Pending Submissions

[Team Actions](#)

Team 3  8
1 Collection Point
0 Pending Submissions

[Team Actions](#)

Team 5  15
5 Collection Points
2 Pending Submissions

[Team Actions](#)

Team 2  7
3 Collection Points
2 Pending Submissions

[Team Actions](#)

Team 4  2
4 Collection Points
6 Pending Submissions

[Team Actions](#)

Team 6  21
10 Collection Points
22 Pending Submissions

[Team Actions](#)

[Add New Team](#)
[1](#) [2](#) [3](#) ... [5](#) [6](#)

- [Manage Team](#)
- [View Members](#)
- [Change Icon](#)
- [Hide](#)
- [Pin to Front](#)
- [Delete Team](#)

Recent Submissions

Submission ID	Team	Collection Point ID	Contents	Time Submitted
00005401	Team 1	0000201	Download	2025-11-13 21:53:54
00005400	Team 4	0000199	Download	2025-11-13 18:21:21
00005399	Team 2	0000004	Download	2025-11-13 09:07:55
00005398	Team 7	0000104	Download	2025-11-13 02:41:44
00005397	Team 2	0000081	Download	2025-11-12 21:11:17
00005396	Team 5	0000223	Download	2025-11-12 17:22:42

[1](#) [2](#) [3](#) ... [5](#) [6](#)
[Add new team dialog](#)

Add New Team

Create new team

Team Name

Description

Create Team

3. Team Management Screen

[← Back to Dashboard](#)

Finance Team

[Edit Team](#)

Total Collection Points

15

Data Submissions

401

Active Members

32

Members

[Add New Team Member](#)

Name	Email	Role	Active	Actions
John A Placeholder	john@place.co	Admin	Active	 
John B Placeholder	johnB@place.co	Member	Active	 
John C Placeholder	johnC@place.co	Admin	Inactive	 
John D Placeholder	johnD@place.co	Member	Active	 
John E Placeholder	johnE@place.co	Member	Inactive	 
John F Placeholder	johnF@place.co	Member	Active	 

1 2 3 ... 5 6

Data Collection Points

[Add New Data Collection Point](#)

Name	Description	Submissions	Due Date	Actions
2025 Q1 Financial Dep	Financial summaries for Q1 of...	13	June 30th, 2025	  
2025 Q1 Financial Dep	Financial summaries for Q1 of...	13	June 30th, 2025	  
2025 Q1 Financial Dep	Financial summaries for Q1 of...	13	June 30th, 2025	  
2025 Q1 Financial Dep	Financial summaries for Q1 of...	13	June 30th, 2025	  
2025 Q1 Financial Dep	Financial summaries for Q1 of...	13	June 30th, 2025	  
2025 Q1 Financial Dep	Financial summaries for Q1 of...	13	June 30th, 2025	  

1 2 3 ... 5 6

Edit Team Information dialog

Edit Team Information

Edit your team's information

Name

Email

Delete Team **Save**

Add team member dialog

Add Member

Add a new member to your team

Name

Email

Role

Role Admin

Member

Add Member

4. Create Collection Point Screen

Create Collection Point

Set up a new data collection with team assignment and validation rules



Team Association

Assign to Team

Finance

Selected Team: Finance

Only members of this team can access and manage this collection



Collection Metadata

Define basic information about this collection

Collection Name

e.g. Q4 Customer Feedback

Description

Describe the purpose of this collection...

Deadline

yyyy-mm-dd



Collection Fields Definition

Define basic information about this collection



Field Definition

Define field information

Field Name

Email

Description

Provide a primary contact email for this submission

Type

String

Checkbox

String

Data Table

Field Definition

Define Field Information

Field Name

Budgetary data

Description

Describe the purpose of this collection..

Type

Data Table

Checkbox

Data Table

String

Columns

S

Headers

Name

Department Head

Budget

Actual

Comment

+ Add Field

Validation Rules

Define data validation logic for this collection

Field Key	Rule Type	Value rules (RegEx)
Email	Required	Value (if applicable)

Field Key	Rule Type	Value rules (RegEx)
e.g., email	Required	Value (if applicable)

+ Add Rule

 **Collection URL**

Share this auto-generated link with team members

<https://collect.app/teams/engineering/xxx>  **Copy**

Link Details

- ✓ Team-restricted access (Engineering team only)
- ✓ Expires in 90 days
- ✓ Can be revoked anytime

5. Submission Form Screen (Team-Restricted)

Finance Team

2025 Q1 Financial Dep

 [Import from Excel file](#)

Data submission for financial data for each departments collected during Q1 of 2025

Validation errors

Email: Email not valid

Budgetary data: Data error

I acknowledge the data submitted is accurate: Acknowledgement required

Successful Submission: ID-313121**Submission in progress...**

Email *

Email

Provide a primary contact email for this submission

Budgetary data *

Name	Department Head	Budget	Actual	Comments	
Emergency Department	John Emer	\$100000	\$140000	Extra money was used for handling an emergency	
Accounting Department	John Acc	\$160000	\$140000	Under Budget	
Accounting Department	John Acc	\$160000	\$140000	Under Budget	
Accounting Department	John Acc	\$160000	\$140000		
Accounting Department	John Acc	\$160000	\$140000		

[Add Row](#)

Comments

Provide any additional comments about the data

Additional comments outside of the Comments column

 I acknowledge the data submitted is accurate * I have reviewed all input data for correctness *[Validate and Submit data](#)**Import From CSV Dialog**

Import data from Excel/CSV file

Upload CSV or Excel and our system will attempt to parse data to the submission



File

Select file

Upload data

6. Collection Review Dashboard

Reporting Pipelines System

Settings Log Out Profile

CN

Finance Team

Collection Stats

54 Total Submissions

2025 Q1 Financial Dep

Actions

Edit Data Collection Point

Configure Data Connectors

Send Data to Data Warehouses

Generate Report

Recent Submissions

Submission ID	Contents	Time Submitted
00005401	Download	2025-11-13 21:53:54
00005400	Download	2025-11-13 18:21:21
00005399	Download	2025-11-13 09:07:55
00005398	Download	2025-11-13 02:41:44
00005397	Download	2025-11-12 21:11:17
00005396	Download	2025-11-12 17:22:42

1 2 3 ... 5 6

Select Data Warehouse Dialog (Open on Send Data to Data Warehouses)

Select Data Warehouse

Select data connections to data warehouse to send data to

Data connections

Production Snowflake

Big Query Analytics

✓ Redshift Staging

Send data

7. Warehouse Connector Configuration Screen

› Warehouse Connectors

Warehouse Connectors

Manage and configure your warehouse connections

Team-level Settings

Global Settings

Add Connector

Configured Connectors

Connector Name	Type	Scope	Status	Actions
Production Snowflake	Snowflake	Team	Connected	
BigQuery Analytics	BigQuery	Global	Connected	
Redshift Staging	Redshift	Team	Error	

Add connector dialog

Add Connector

Configure a new warehouse connection

Connector Type

Host

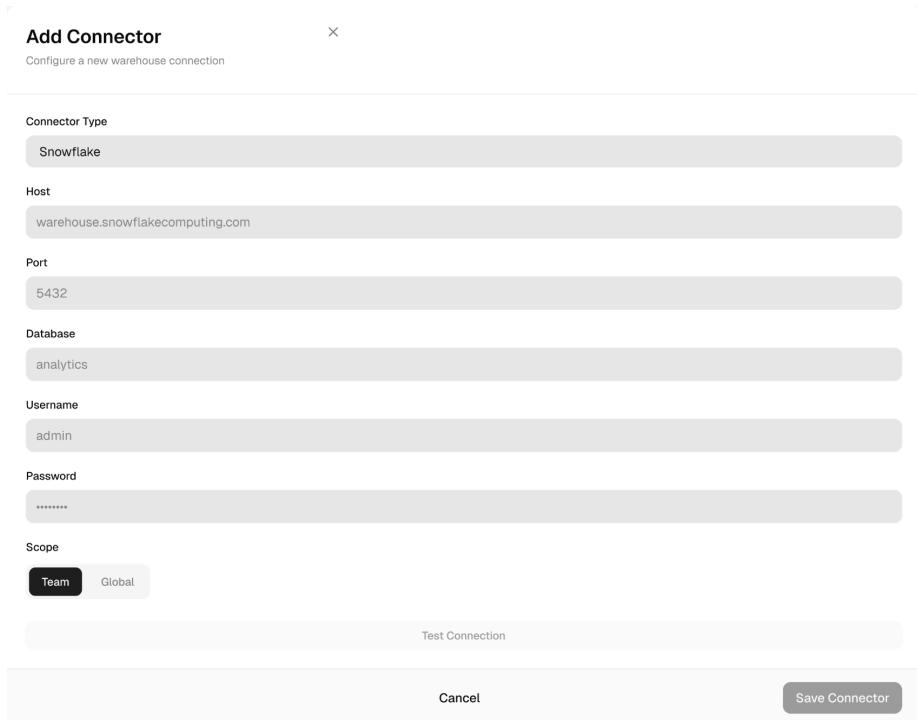
Port

Database

Username

Password

Scope
 Team Global



8. Data Mapping Screen

> Data Mapping

Data Mapping

Save Mappings

Align incoming source fields to system destination fields

Source Data Connection

Source Name
2025 Q1 Financial Dep

Total Fields Missing Mappings Mapped Fields
12 **2** **4**

Destination

Destination Name
Production Snowflake

Field Mappings

Auto-map Fields

Source Field	Source Type	→	Destination Field	Destination Type	Status
amount	number	→	amount	number	Mapped
department	string	→	department	string	Mapped
submitted_at	datetime	→	submission	datetime	Mapped
manager_name	string	→	Enter Field		Missing
review_status	string	→	Enter Field		Missing
notes	string	→	notes	string	Mapped

Auto-mapping dialog

Auto-map Fields		
Automatically matched fields. Review before applying.		
Source Field	Suggested Mapping	Status
amount	Amount	Auto-mapped
department	Department	Auto-mapped
submitted_at	Submission	Auto-mapped
notes	Notes	Auto-mapped
manager_name	—	No match found
review_status	—	Needs review

Cancel Apply Auto-mapping

9. Reports Screen

Dashboard

Reports

Generate and manage your data reports

Generate New Report

From Date

01/01/2024

To Date

31/12/2024

Data Collection

All Collections

Export Format

CSV PDF

Generate Report

Email Report

Report History

3 reports

Report Name	Collection	Format	Date	Size	Actions
Q4 2024 Report	All Collections	PDF	2024-12-20	2.4 MB	
November Analytics	User Data	CSV	2024-11-30	1.8 MB	
October Summary	Sales Data	PDF	2024-10-31	3.2 MB	

Configure Report

Report Summary

Date Range:

2024-01-01 to 2024-12-31

Collection:

All Collections

Format:

CSV

Report Options

- Executive Summary**
High-level overview of key metrics
- Charts & Graphs**
Visual representations of data trends
- Detailed Data Tables**
Complete row-level data records
- Send via Email

Cancel

Generate Report

Email Report

Report Details

Date Range:

2024-01-01 to 2024-12-31

Collection:

All Collections

Format:

CSV

Recipients *

Enter email addresses separated by commas e.g., user1@example.com, user2@example.com

Email Subject *

Report 2025-11-14

Options

- Include Raw Data**
Attach data file to email
- Schedule Email**
Send at a specific time

Cancel

Send Email