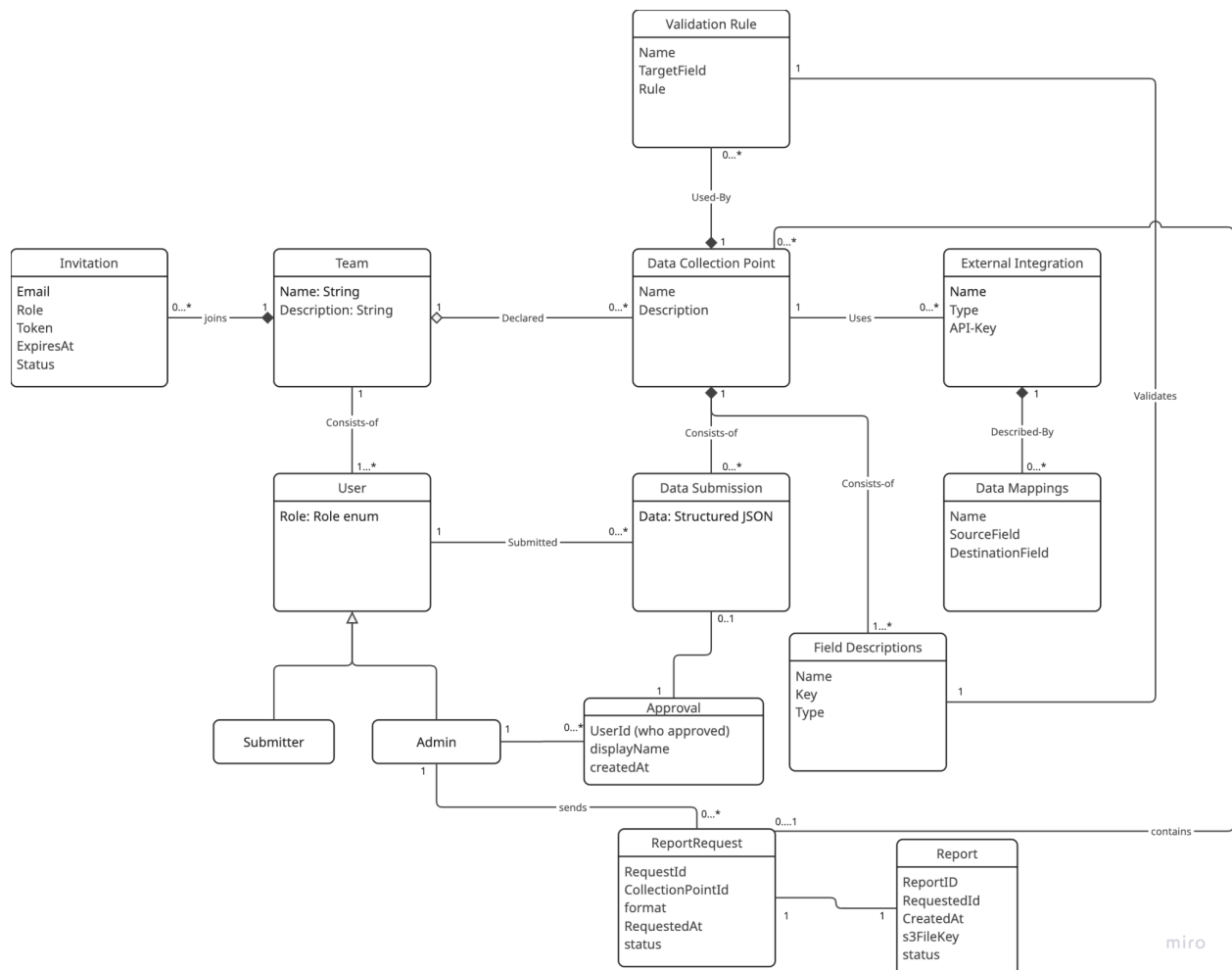# CSC 375 – Introduction to Systems Analysis

<u>Data Model Document</u>

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

Domain Model:

Data Dictionary:

User Table

Column	Data Type	Description
user_id	int	Unique ID number identifying each user
user_first_name	char(50)	First name of user
user_last_name	char(50)	Last name of user
email	char(50)	User's email
team_id	int	Reference ID to Team table
role	enum	2 possible values: "Admin", "Submitter"
created_at	datetime	Creation timestamp
updated_at	datetime(500)	Update timestamps

Relations

Relation Name	Column Name	Data Type	Description
belongsToTeam	team_id	int	Foreign Key to Team table, referencing team_id value

Team Table

Column	Data Type	Description
team_id	int	Unique ID number identifying each team
team_name	char(50)	Team name
created_by	user	Author
created_at	datetime	Creation timestamp
updated_by	user(500)	Includes users responsible for updates
updated_at	datetime(500)	Update timestamps

Data Submission Table

Column	Data Type	Description
submission_id	int	Unique ID number identifying each data submission
submission_data	JSON	Submission data, in a structured JSON format
dcp_id	int	ID of the Data Collection Point this submission belongs to
created_by	int	ID of the user that created the submission
created_at	datetime	Creation timestamp
updated_by	int	ID of the user that updated the submission
updated_at	datetime	Update timestamps

Relations

Relation Name	Column Name	Data Type	Description
submittedByUser	**user_id**	int	User that submitted data
collectionPoint	**dcp_id**	int	Data collection point responsible for submission
dataWarehouse	**dw_id**	int	Data warehouse responsible for storing submission

Data Collection Point Table

Column	Data Type	Description
dcp_id	int	Unique ID number identifying each data collection point
dcp_desc	char(500)	Short description of the data collection point
team_id	int	The ID of the team that this collection point belong to
created_by	int	ID of the user that created the submission
created_at	datetime	Creation timestamp

updated_by	int	ID of the user that updated the submission
updated_at	datetime	Update timestamps

Relations

Relation Name	Column Name	Data Type	Description
createdBy	**user_id**	int	ID of author user

Invitation Table

Column	Data Type	Description
invitation_id	int	Unique ID number identifying each invitation
user_id	int	Foreign key linking the invitation to a team
token	char(255)	Encrypted invitation token used for security
team_id	int	ID of the team this invitation belongs to
status	enum	Indicates if the invitation is Pending, Accepted or Rejected
created_by	int	ID of the user that created the submission
created_at	datetime	Creation timestamp
email	char(50)	Email address of invited user
role	enum	The role assigned to the invitee

Relations

Relation Name	Column Name	Data Type	Description
createdByTeam	**team_id**	int	Team being invited to

External Integration Table

Column	Data Type	Description
name	char(255)	Name of API
type	char(1000)	Type of API

api_key	char(255)	API Key

Data Mappings Table

Column	Data Type	Description
datamap_name	char(255)	Name of Data Map
source_field	char(255)	Source Field
destination_field	char(255)	Destination Field
created_by	int	ID of the user that created the submission
created_at	datetime	Creation timestamp

Field Descriptions Table

Column	Data Type	Description
fd_name	char(255)	Name of Field Description
fd_key	char(255)	Key
fd_type	enum	Describes type of Field Description
validation_rule_id	int	ID of the validation rule connected to this field
created_by	int	ID of the user that created the submission
created_at	datetime	Creation timestamp

Relations

Relation Name	Column Name	Data Type	Description
validatedBy	validation_id	char(255)	References rule to be used for validation

Report Request Table

Column	Data Type	Description
req_id	int	ID of Request
req_dcp	char(255)	Data Collection Point the request is being sent to
format	char(255)	Describes file format of the request

req_status	enum	Pending/Accepted/Rejected
rep_id	int	ID of the report
created_by	int	ID of the user that created the request
created_at	datetime	Creation timestamp

Relations

Relation Name	Column Name	Data Type	Description
req_report	rep_id	int	ID of report being requested

Report Table

Column	Data Type	Description
rep_id	int	ID of Report
rep_req	int	ID of Report Request
s3_file_key	string	S3 key
rep_status	enum	Pending/Accepted/Rejected
created_by	int	ID of the user that created the request
created_at	datetime	Creation timestamp