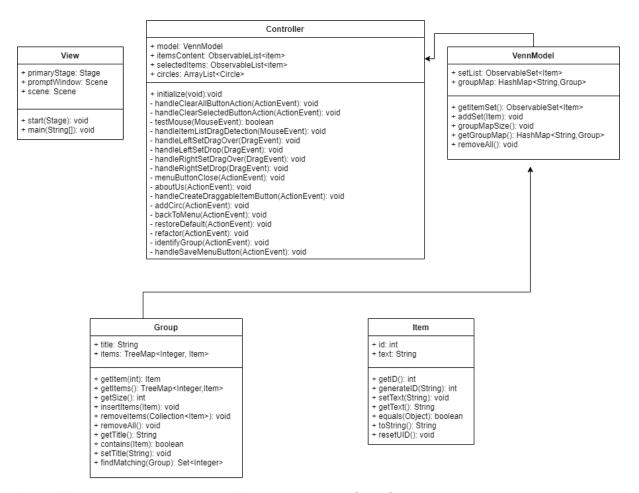
# EECS 2311 Group 3 Design Document

## Created by:

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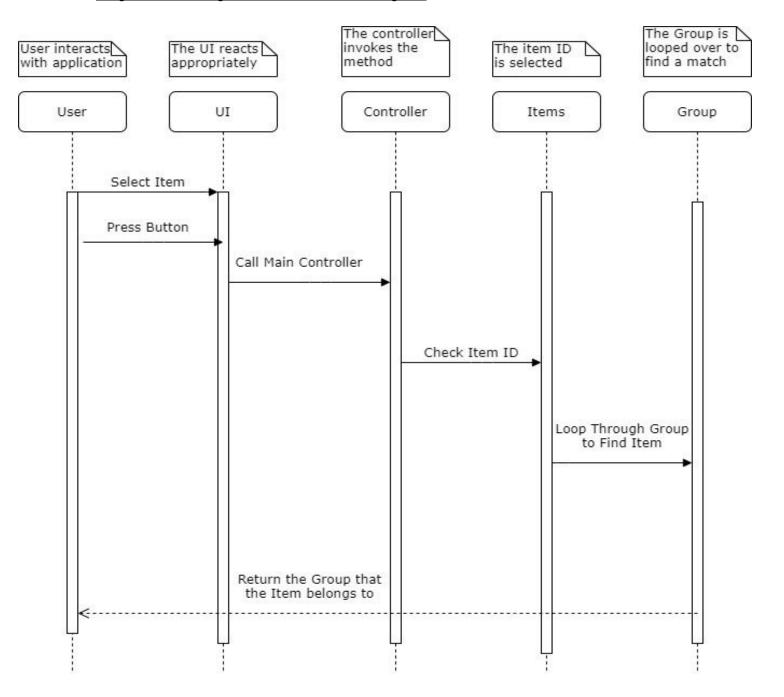
### Class Diagram:



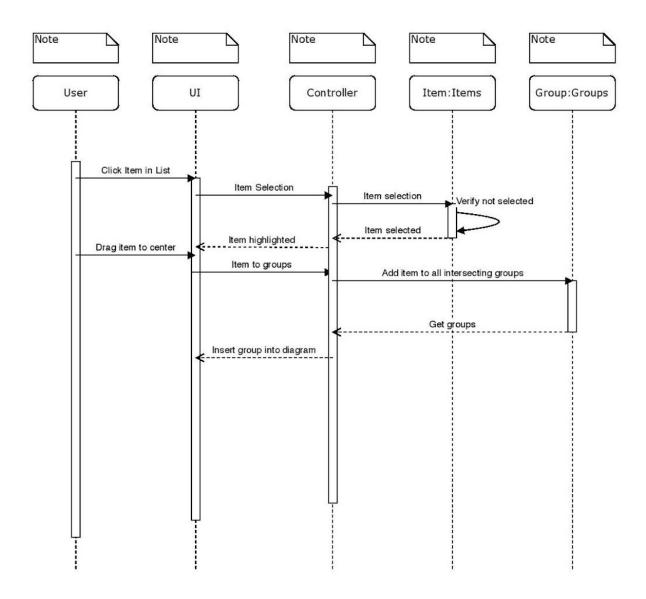
Note: The project utilizes JavaFX which utilizes fxml files to develop the user interface components which are instantiated within the controller class. Thus the view class is technically not related to the controller class.

## Sequence Diagrams

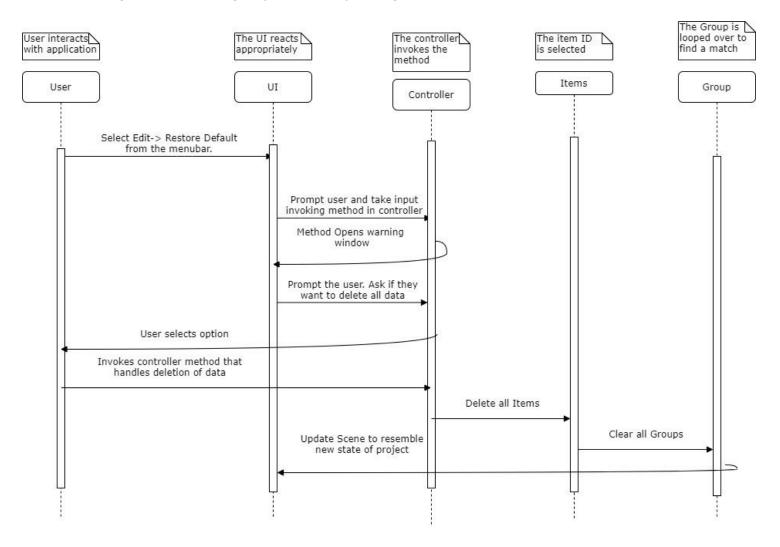
Diagram 1 - Finding Which Set an Item Belongs to:



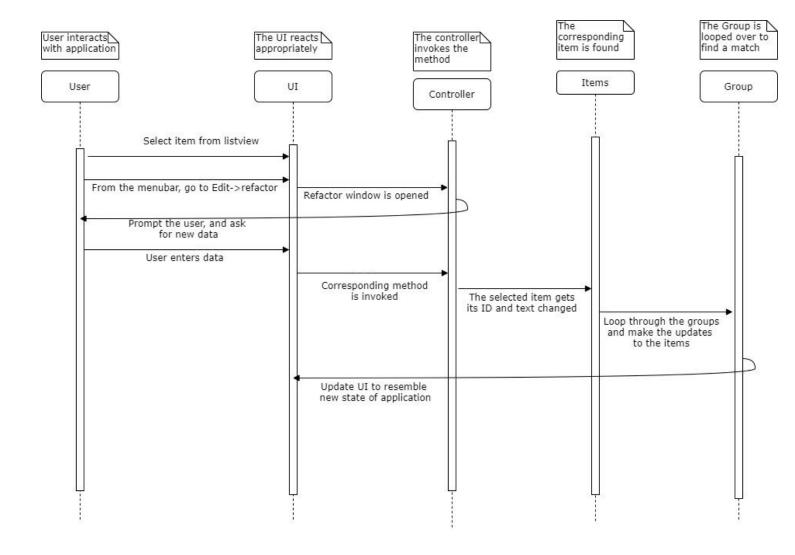
<u>Diagram 2 - Adding an item to intersecting groups:</u>



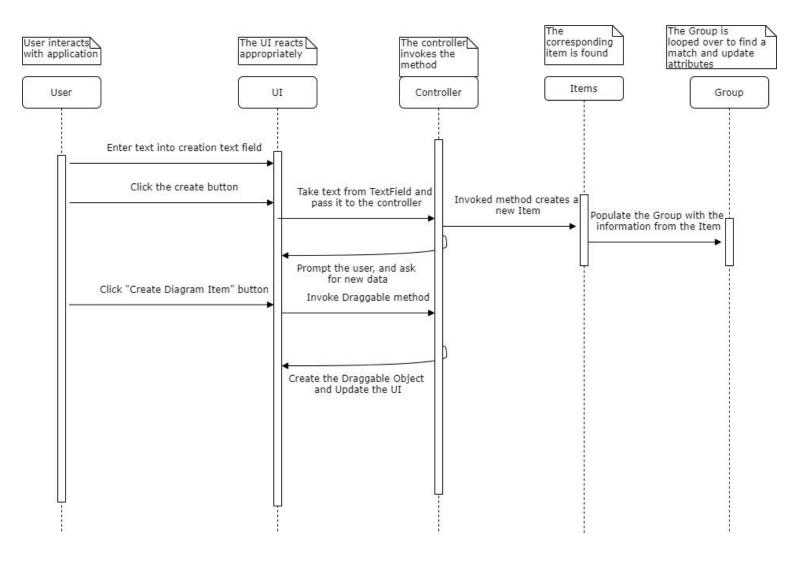
<u>Diagram 3 - Restoring project to factory settings:</u>



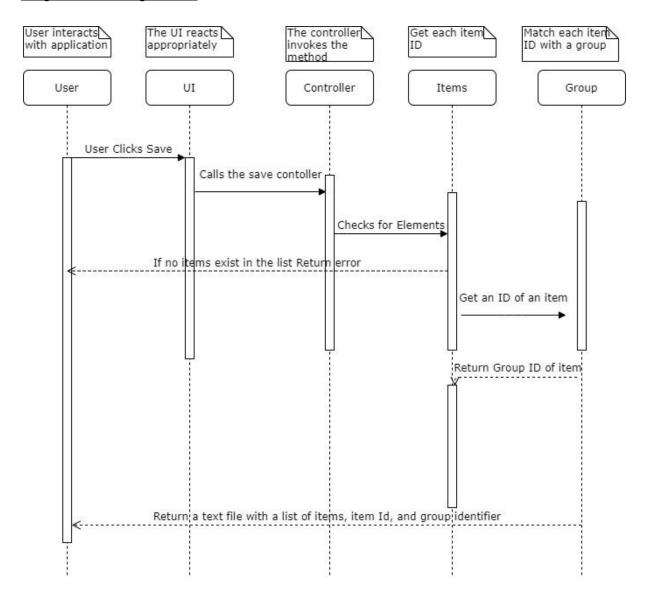
#### <u>Diagram 4 - Refactoring an Element:</u>



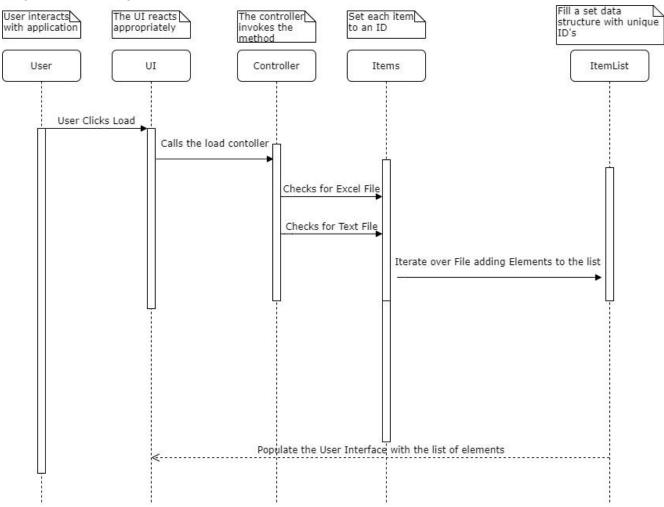
<u>Diagram 5 - Creating Draggable Item:</u>

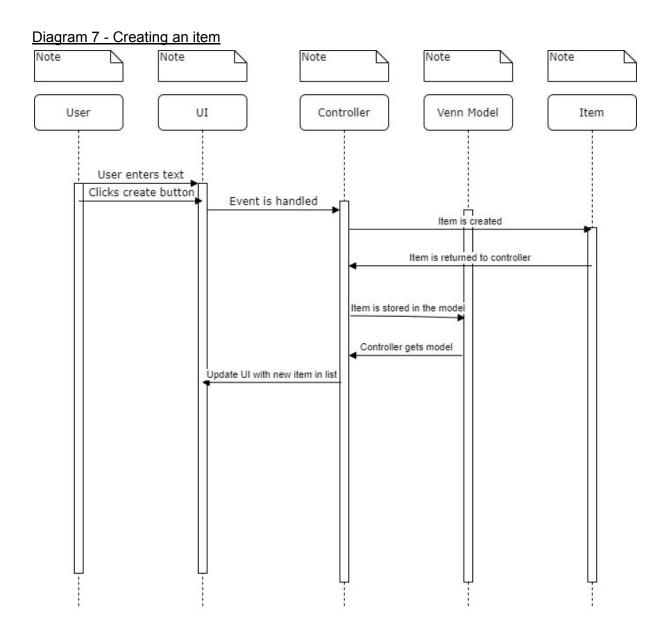


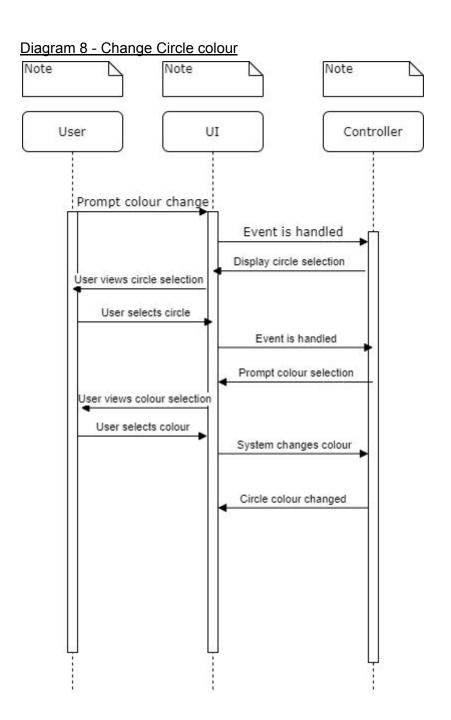
#### Diagram 6 - Saving a State



#### Diagram 7 - Loading a state







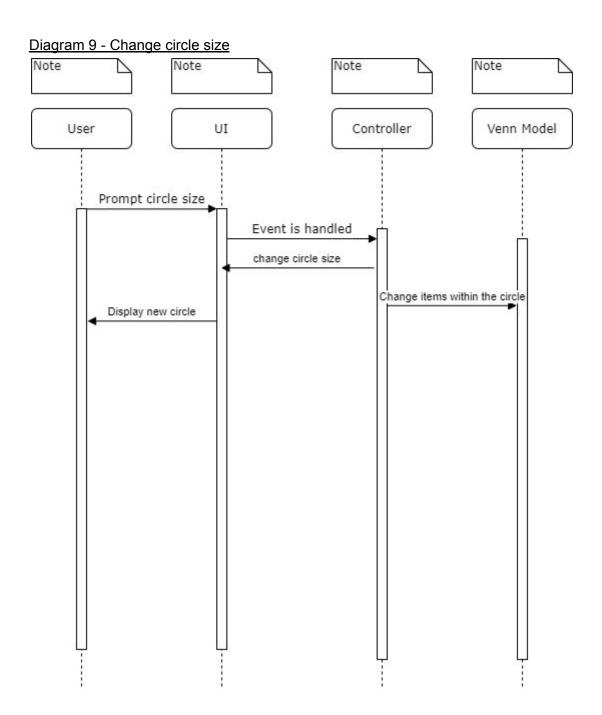


Diagram 10 - Delete all items Note Note Note Note UI Controller Venn Model User Prompt to delete items Event is handled Remove all items from the sets Get model Reflect model in UI Display new model

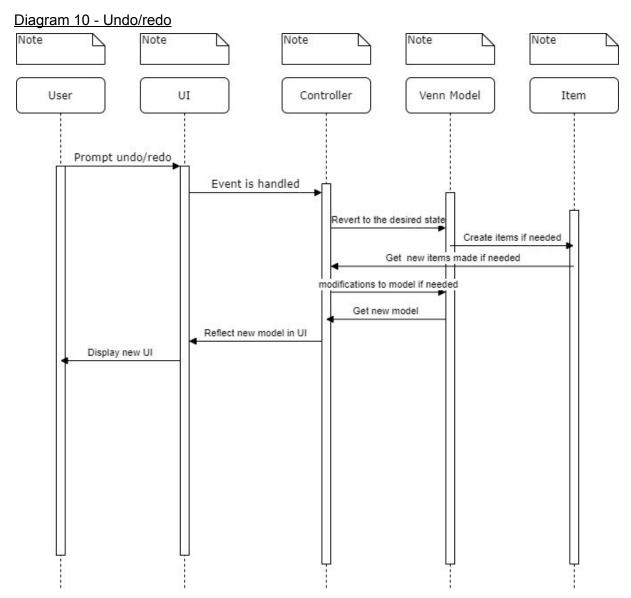


Diagram 11 - Undo/redo

## Maintenance Scenarios

Adding a dynamic (infinite) amount of circles	Modify the Controller class to allow for an unlimited amount of circles. Calculations to fit N amount of circles within the scene must be done to ensure usability after adding the circles during run time.
Adding export to PDF	Modifying the menu button, adding an additional option to export the current diagram to a pdf. Must modify the Controller class, and add functionality to export to PDF

Allow Items that use more fields (i.e. quantity)	Create a new class that extends Item. Proper modifications must be done to the controller and FXML files to allow inputting of data for the new Item type.
Allow different diagrams in one file	Update FXML and view to have tabs, which can be clicked to switch to different diagram panes by modifying the Controller class.
Adding a circle scaler	Updating the FXML and view to add a slider. Update the controller to reflect the sliders value onto the diagram's circles.
Allowing for different shapes (rather then just circles)	Modify the FXML files to allow configurations for adding different shapes (i.e. rectangles, triangles). These configuration settings will be reflected in the diagram pane. The functionality of the newly added buttons will be implemented in the controller.
Allow user to move the diagram shapes	Create a class, draggable shape, this will act as the container for tags to go into. This shape must be able to be dragged around in the diagram.