CS308 Gizmoball Use Cases

**Name:** Add ball

**Preconditions:** Game not running, no ball placed

**Trigger:** Add ball button pressed

**Main:**

1. User selects ball velocity (X and Y)

2. User selects where to place ball (not constrained to square)

**Alterative:**

2. User selects an area where ball would overlap with gizmo

3. System prompts user of error in ball placement

4. Go to step 2 (Main)

**Postconditions:** ball placed on game board

**Name:** Enter add gizmo mode

**Preconditions:** Game not running

**Main:**

1. User selects add gizmo button

2. User selects gizmo they wish to add

**Postconditions:** In add gizmo mode

**Name:** Add gizmo

**Preconditions:** In add gizmo mode

**Main:**

1. User selects empty board square to place gizmo

**Alterative:**

1. User selects a used board square to place gizmo

2. System prompts user of error in gizmo placement

3. Go to step 1 (Main)

**Postconditions:** The selected gizmo is added to the game board

**Name:** Enter move gizmo mode

**Preconditions:** Game not running, at least one gizmo placed

**Main:**

1. User selects move gizmo button

**Postconditions:** In move gizmo mode

**Name:** Move Gizmos

**Preconditions:** In move gizmo mode

**Main:**

1. User selects gizmo they wish to move

2. User selects empty board square to place gizmo

**Alterative:**

1. User selects an empty board square to move

2. System prompts user of error in gizmo selection

3. Go to step 1 (Main)

2. User selects a used board square to place gizmo

3. System prompts user of error in gizmo placement

4. Go to step 2 (Main)

**Postconditions:** Selected gizmo moved to selected square

**Name:** Enter rotate gizmo mode

**Preconditions:** Game not running, with at least one gizmo placed

**Main:**

1. User selects rotate gizmo button

**Postconditions:** In rotate gizmo mode

**Name:** Rotate Gizmos

**Preconditions:** In rotate gizmo mode

**Main:**

1. User selects gizmo they wish to rotate

**Alterative:**

1. User selects an empty board square

2. System prompts user of error in gizmo selection

3. Go to step 1 (Main)

**Postconditions:** Selected gizmo is rotated

**Name:** Enter delete gizmo mode

**Preconditions:** Game not running, with at least one gizmo placed

**Main:**

1. User selects delete gizmo button

**Postconditions:** In delete gizmo mode

**Name:** Delete Gizmo

**Preconditions:** In delete gizmo mode

**Main:**

1. User selects the gizmo they wish to delete

**Alternative:**

1. User selects an empty board square

2. System prompts user to select a gizmo to delete

3. Go to step 1 (Main)

**Postconditions:** The selected gizmo is removed from the game board

**Name:** Enter connect gizmo mode

**Preconditions:** Game not running, with at least one gizmo placed

**Main:**

1. User selects connect gizmo button

**Postconditions:** In connect gizmo mode

**Name:** Connect Gizmo

**Preconditions:** In connect gizmo mode

**Main:**

1. User selects the gizmo they wish to connect

2. User presses the keyboard key they wish to bind to the gizmo action

3. System prompts user to choose when action is preformed (on press or release)

**Alternative:**

2. User selects another gizmo for the currently selected gizmo to connect to

1. User selects an empty board square

2. System prompts user to select a gizmo to connect

3. Go to step 1

2. User selects an empty board square

3. System prompts user to select another gizmo or press and key

4. Go to step 2

**Postconditions:** The connection has been made on the selected gizmo

**Name:** Save Board

**Preconditions:** Game not running

**Triggers:** Save button pressed

**Main:**

1. System saves the current game board to file.

**Postconditions:** Game board is saved to a file

**Name:** Load Board

**Preconditions:** Game not running

**Triggers:** Load button pressed

**Main:**

1. System loads the game board from save file.

**Postconditions:** Game board is created from save file.

**Name:** Run game

**Preconditions:** Game not running

**Triggers:** Run button pressed

**Main:**

1. System begins the game, where the user may press keys to trigger gizmo actions

**Postconditions:** Game is running

**Name:** Stop game

**Preconditions:** Game running

**Triggers:** Stop button pressed

**Main:**

1. Game stops running

**Postconditions:** Game is not running

**Name:** Quit game

**Preconditions:** None

**Triggers:** Quit button pressed

**Main:**

1. Program shuts down

**Postconditions:** Program is closed