

Class Diagram Description

The class diagram for GizmoBall shows most of the classes which are necessary for the final implementation of the game and shows their relationships with each other. The class diagram is split into three main sections; Model, View and Controller.

Model

The model is responsible for dealing with all of the gizmos and saving and loading the layout. The different type of gizmos implement a Gizmo interface since they all share similar methods and variables. Absorber and Ball don't implement Gizmo interface since they have big differences to the gizmos.

The model will implement an observable interface which will allow it to notify an ArrayList of observers. The main observer of the model is the View observes changes in the model to update the board.

View

The view is responsible for showing the GUI and board. When a button on the GUI is clicked it notifies the BuildListener or RunListener. Depending on which mode the game is in will dictate the GUI and board that is shown.

Controller

The controller deals with the different kinds of listeners. The addGizmoListener will actually be many listeners but for simplicity in the diagram they have been combined into 1. The listeners that will be in the controller are; AddAbsorberListener, AddBallListener, AddGizmoListener AddLeftRight, FlipperListener, DeleteGizmoListener, ConnectGizmoListener, BuildKeyListener, RunKeyListener, KeyConnectGizmoListener, MoveGizmoListener and RotateGizmoListener.