Project Multitris Group 23

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5. Design Details

5.1 Class Responsibility Collaborator (CRC) Cards

Class ApplicationStateManager	
Responsibilities - Redirects input depending on the current ApplicationState.	Collaborators InputManager ApplicationState

Abstract Class ApplicationState	
	Collaborators
- Superclass for the different states.	ApplicationStateManager

Class MenuState	
Responsibilities	Collaborators
- Renders menu.	ApplicationStateManager
- Handles menu actions.	

Class LobbyState	
Responsibilities - Renders the lobby.	Collaborators ApplicationStateManager
- Handles lobby actions.	ClientCommunication

Class GameSessionState	
Responsibilities - Renders the current game session Handles game session actions.	Collaborators ApplicationStateManager ClientCommunication

Class GameLogic	
Responsibilities - Handles game logic.	Collaborators Player Board

Class Board	
Responsibilities	Collaborators
- Stores fixed Bricks.	GameLogic
	Brick

Class Brick	
Responsibilities - Knows which player it belongs to Knows brick type (powerup?).	Collaborators Board

Class Piece	
Responsibilities - Has a list of bricks contained in the piece.	Collaborators Brick PieceGenerator Player

Class PieceGenerator	
Responsibilities - Generates pieces for players.	Collaborators Piece Player

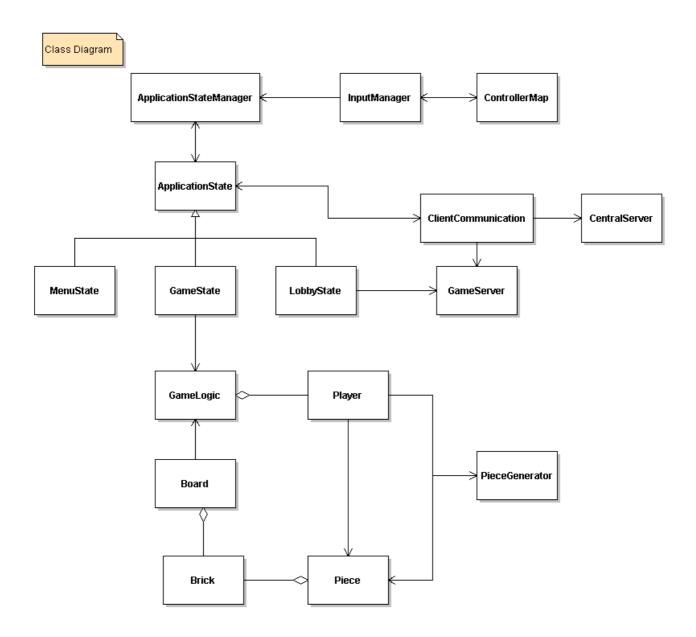
Class Player	
Responsibilities	Collaborators
- Keeps track of the player's current piece.	PieceGenerator
- Keeps track of the player's powerups.	GameLogic
- Keeps track of player info.	Piece

Class InputManager	
Responsibilities - Interprets and forwards player actions.	Collaborators ApplicationStateManager ControllerMap

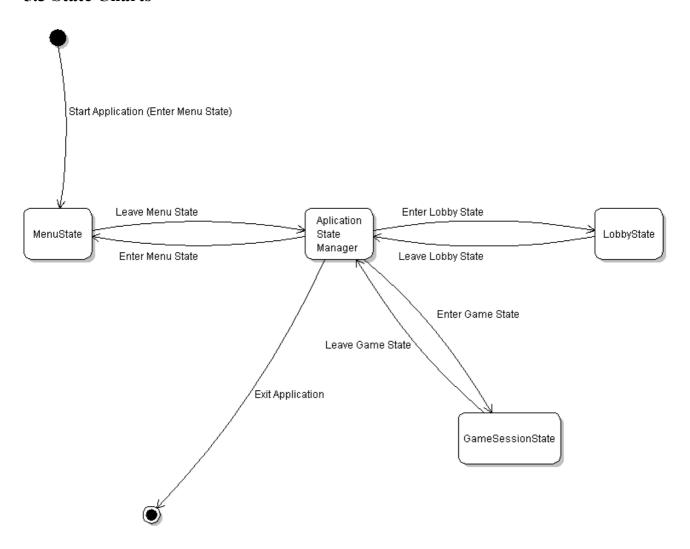
Class ClientCommunication	
Responsibilities - Handles network communication.	Collaborators GameServer CentralServer ApplicationState

Class ControllerMap	
Responsibilities	Collaborators
- Translates player input into commands.	InputManager

5.2 Class Diagram

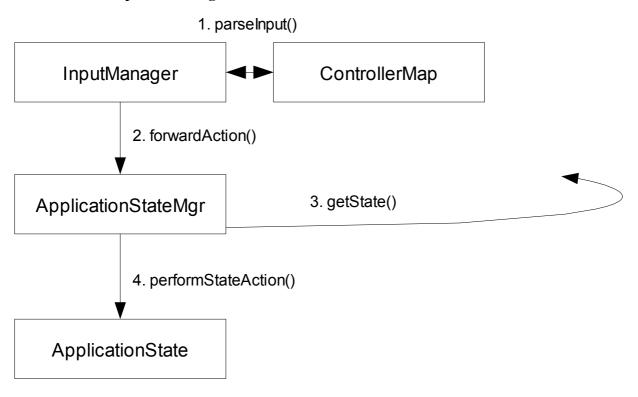


5.3 State Charts

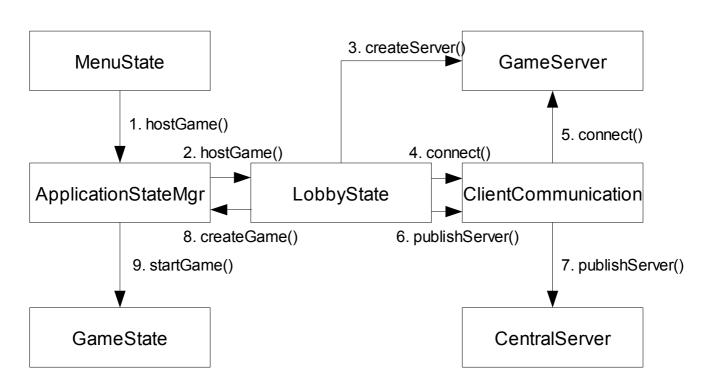


5.4 Interaction Diagrams

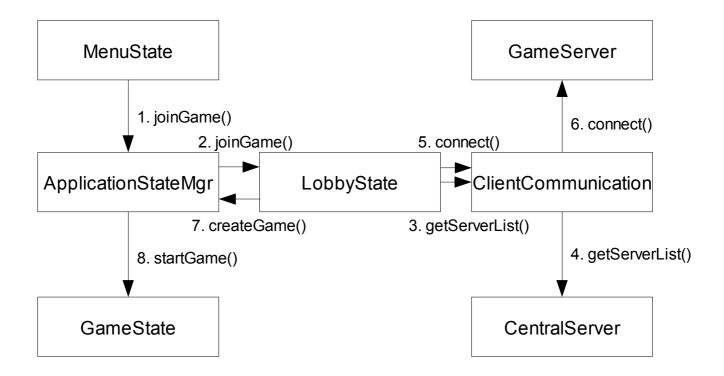
5.4.1 General Input Handling



5.4.2 Host Game



5.4.3 Join Game



5.4.4 Singleplayer game

