**2. selectModeGUI Class**

2.1 Class-Responsibility-Collaborator card

|  |  |
| --- | --- |
| selectModeGUI | |
| Responsibilities | Collaborator |
| * show the selectMode interface to user * wait for user’s action to select player number * wait for user’s action to select game board size * wait for user’s action to select human/AI mode for each player | * selectMode Controller class * mainGame Controller class |

2.2 selectModeGUI Class

|  |
| --- |
| selectModeGUI |
| Frame  Button  Label  Checkbox  Radio button  selectMode controller  mainGame controller |
| Init()  clickOnSelectPlayer()  clickOnSelectSize()  clickOnSelectMode()  clickOnStartButton() |

2.3 Function explanations

2.3.1 Init()

* initialize and show the select mode interface to user, waiting for their action
* pre: the game program is open
* post: initialize and show the select mode interface to user
* return: nothing

2.3.2 clickOnSelectPlayer()

* when user clicks the button to select player number, then send message to selectMode controller to set the number of players
* pre: when user clicks the button to select player number
* post: send message to selectMode controller to set the number of players
* return: nothing

2.3.3 clickOnSelectSize()

* when user clicks the button to select game board size, then send message to selectMode controller to set the game board size
* pre: when user clicks the button to select game board size
* post: send message to selectMode controller to set the game board size
* return: nothing

2.3.4 clickOnSelectMode()

* when user clicks the button to select Human/AI mode for each player, then send message to selectMode controller to set the Human/AI mode for each player
* pre: when user clicks the button to select Human/AI mode for each player
* post: send message to selectMode controller to set the Human/AI mode for each player
* return: nothing

2.3.5 clickOnSubmitButton()

* when user clicks on the submit button, then send message to selectMode controller to close selectMode interface and game controller to open and initialize the game interface
* pre: when user clicks on the submit button
* post: send message to selectMode controller to close selectMode interface and game controller to open and initialize the game interface
* return: nothing

**3. mainGameGUI Class**

3.1 Class-Responsibility-Collaborator card

|  |  |
| --- | --- |
| mainGameGUI | |
| Responsibilities | Collaborator |
| * show the main game interface to user * wait for user’s action to click Start button * wait for user’s action to click tiles * wait for user’s action to click switch button * wait for user’s action to click end or goBack button * update the game board in time | * selectMode Controller class * mainGame Controller class |

3.2 mainGameGUI Class

|  |
| --- |
| mainGameGUI |
| Frame  Button  Label  Checkbox  Radio button  selectMode controller  mainGame controller |
| Init()  clickOnStartButton()  clickOnMoveButtion()  clickOnShootButton()  clickOnSwitchButton()  clickOnEndButton()  clickOnGoBackButton()  updateGameBoard() |

3.3 Function explanations

3.3.1 Init()

* initialize and show the main game interface to user, waiting for their action
* pre: when user clicks on the submit button in selectMode interface
* post: initialize and show the main game interface to user
* return: nothing

3.3.2 clickOnStartButton()

* when user clicks on the start button, then send message to mainGame controller to begin the game
* pre: when user clicks on the start button in mainGame interface
* post: send message to mainGame controller to begin the game
* return: nothing

3.3.3 clickOnMoveButton()

* when user clicks on the move button, then send message to mainGame controller to move the robot
* pre: when user clicks on the move button
* post: send message to mainGame controller to move the robot
* return: nothing

3.3.3 clickOnShootButton()

* when user clicks on the shoot button, then send message to mainGame controller to make current robot shoot and reduce the health of enemys
* pre: when user clicks on the shoot button
* post: send message to mainGame controller to make current robot shoot and reduce the health of enemys
* return: nothing

3.3.4 clickOnSwitchButton()

* when user clicks on the switch button, then send message to mainGame controller to end the behavior of current robot and begin the behavior of robot of next team
* pre: when user clicks on the switch button
* post: send message to mainGame controller to end the behavior of current robot and begin the behavior of robot of next team
* return: nothing

3.3.5 clickOnEndButton()

* when user clicks on the end button, then send message to mainGame controller to end the game and close the mainGame interface
* pre: when user clicks on the end button
* post: send message to mainGame controller to end the game and close the mainGame interface
* return: nothing

3.3.6 clickOnGoBackButton()

* when user clicks on the goBack button, then send message to mainGame controller to end the current game, close the mainGame interface and send message to SelectMode controller to open the selectMode interface
* pre: when user clicks on the goBack button
* post: the game is end and return to the selectMode interface
* return: nothing

3.3.7 updateGameBoard()

* when the user clicks any button, the interface should update its gameboard based on mainGame controller
* pre: when user does any action on the mainGame GUI
* post: the gameBoard should be updated based on mainGame controller
* return: nothing