Mech & Minion Documentary

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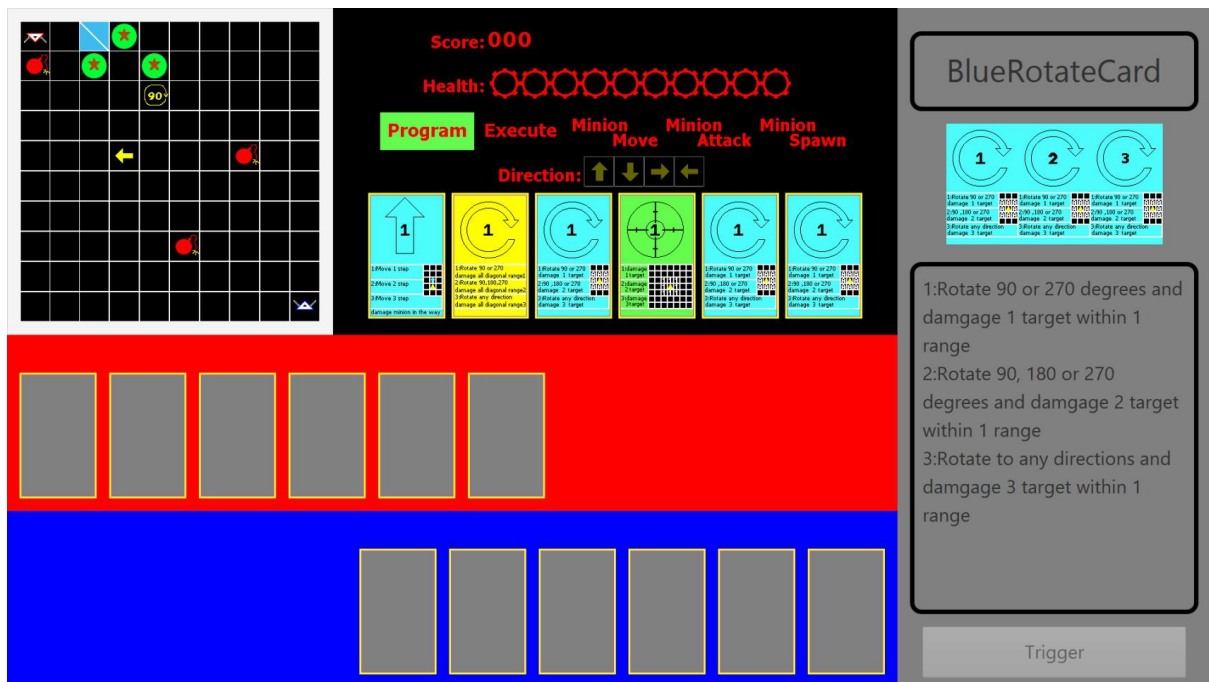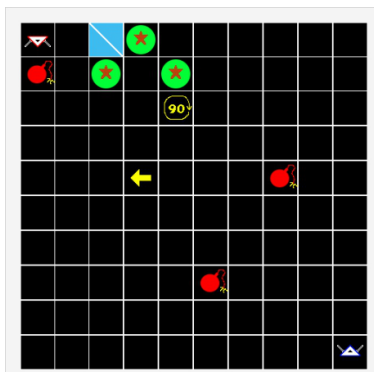
How to play

Introduction

Mech & Minion is a game inspired by board game with the same name "mech and minions" by riot where you install the command card to control the mech to destroy the minion

Screen

Board

Board refers to a single 10x10 tile that is used to make up the Game Board.

Special Tile

It is tile that when the Red Mech or Blue Mech passes by, it creates a special effect. Special tile has 4 types .

1.explosive tile - when the Mech passes, will damage all around that tile.

2.move tile - when the Mech passes, will move direction of that tile.

3.rotate tile - when the Mech passes, will rotate Mech 90, 180, or 270 degrees.

4.slip tile - when the Mech passes, will pass Mech to forward tile

5.spawn tile - this tile will not effect to Mech but Minion will be built in this point.

Mech

They are 2 Mech in this game including Red Mech and Blue Mech. For each Mech will have a command board each board will have 6 slots for putting Command Cards.
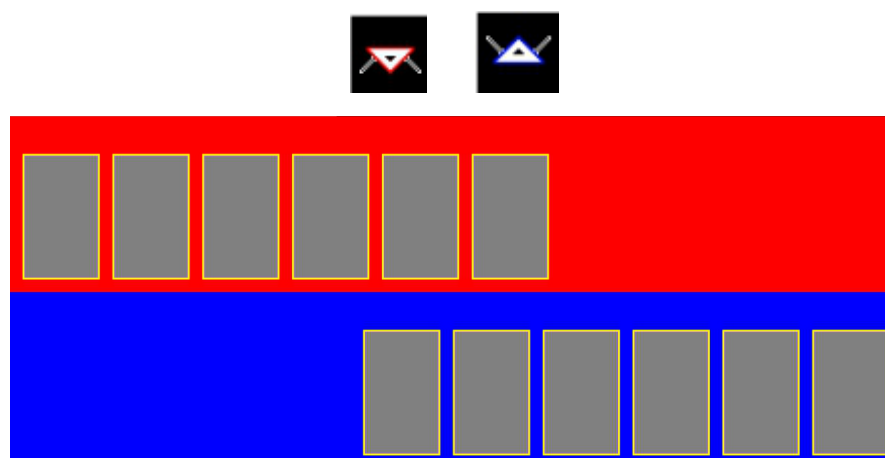
Phase

They are 5 Phases, Program, Execute, Minion Move, Minion Attack, Minion Spawn. The green highlight show the current phase.

Drafted Card
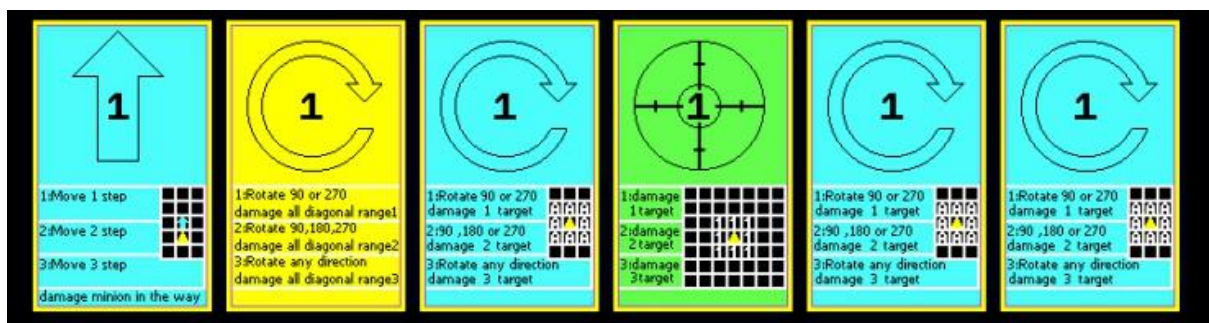
Command Card that you can out into the mech in this round

Health

Red Mech and Blue Mech will use the same health. When Mech are damaged, health will be reduce by 1. Default health when you start game is 10.

Score

When you kill 1 Minion, your score increase by 1.

Minions

　　　Minions is a bot that can damage Red Mech and Blue Mech. All Minion in the Board will damage All Border that have Mech and don't damage Minions. This damage will reduce health by 1.

Command Cards

　　　Command Cards are individual commands that allow Mechs to move, rotate and attack. Command Cards are drafted, and either programmed or scrapped . Each card can be upgraded 2 times.

There are three kinds of Mech Command Cards: Attack, Move, and Rotate.

1. Attack Card will deal 1 Damage to one or more targets on the board. Attack Card never move or turn the Mech.

2. Move Card move the Mech to another space, while facing the same direction it started. If the Mech moves onto a Minion or another Mech is pushed along in front of the moving Mech. You must move unless you are blocked by something impassable.

3. Rotate Card rotate the Mech without moving it. You must execute a Turn Command, you may not forego them.

For each types of Command Card will has 4 colors : red, blue, green, yellow. And Command Card has 3 levels, when you put same color Command Card into Command Board level will increase by 1.

Term in Cards

-Adjacent

Spaces or figures are adjacent if they share an edge. For example, a Mech is adjacent to the four spaces surrounding it. Diagonal spaces are not Adjacent.

-Diagonal

Spaces or figures are diagonal if they share an edge. For example, a Mech is Diagonal to the four spaces surrounding it. Adjacent spaces are not Diagonal.

-Border

Spaces or figures are merge adjacent and diagonal together

Damage Cards
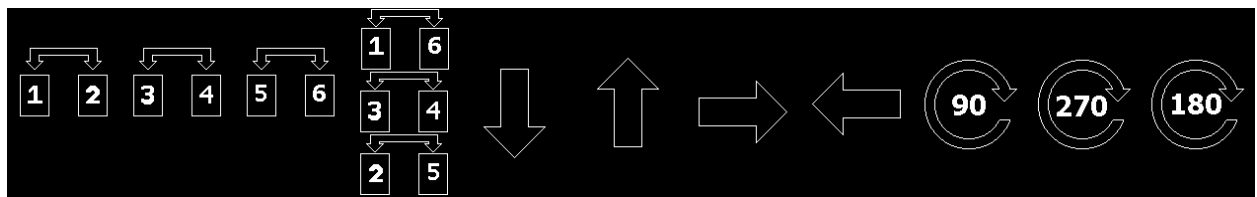
Damage Cards drawn from the Damage Deck. Damage can make your Mech harder to control and achieving your objective more difficult.

Flow of the Game

Phase -1.Program

You will choose Command Card in Draft Command Board   and put into Red Mech and Blue Mech 2 card per Mech. *You Must put Only 2 cards per Mech.

When you put the same color on top. The card that you put will be upgraded by the tier of the card.
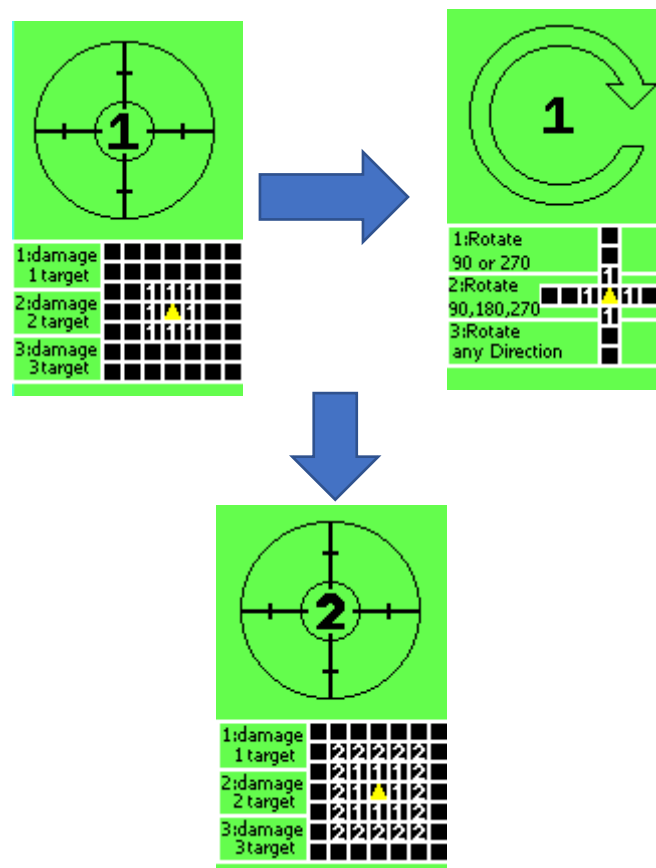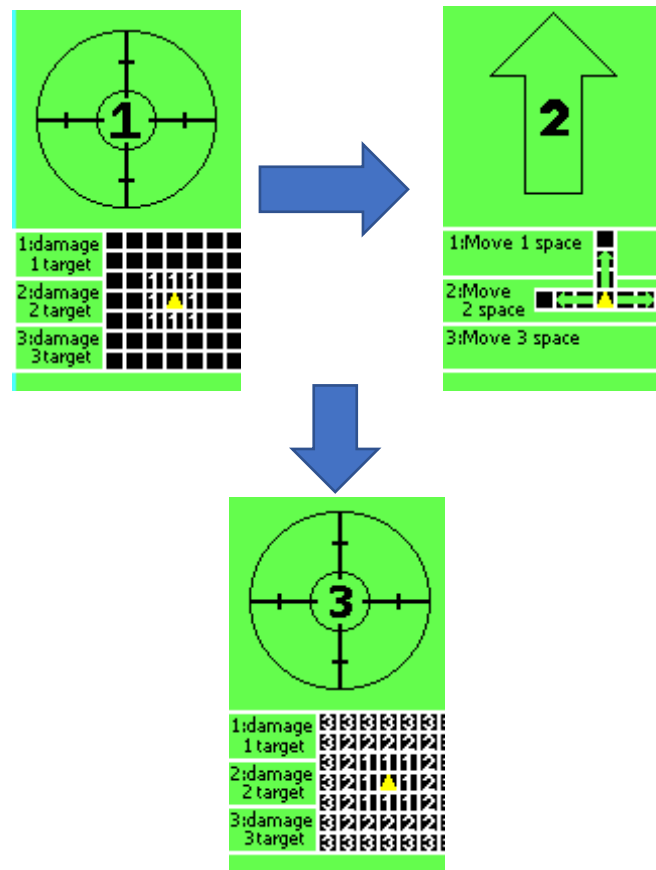
2.Excecute

Game will run since first slot of Command Board in Red Mech to the last slot. After that Game will run Command Board of Blue Mech similar to Red Mech.

The game will show the current command that executing and make the yellow border to show what you can select.
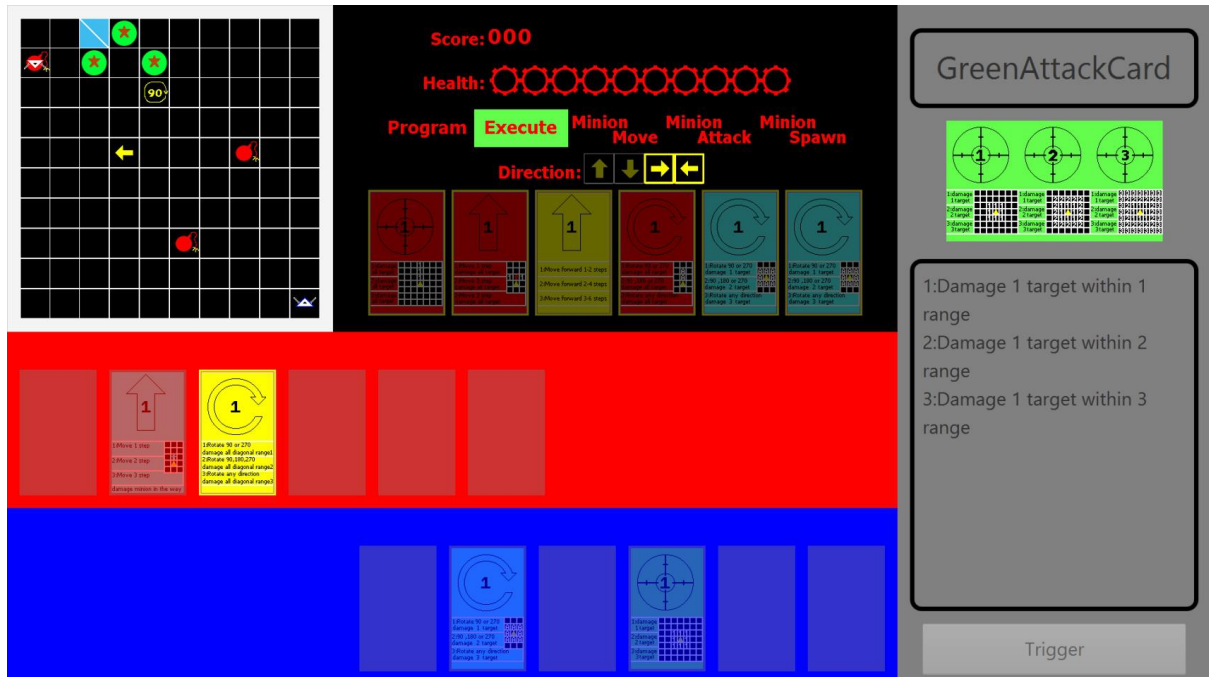
Select the direction that the mech will face

3.Minion Move

All Minion will move same random direction. By click The arrow button.

4.Minion Attack

All Minion will Attack All mech in Border in this Board. If the mech get attacked you will have to click the mech for an attack. And then click the trigger button to trigger the damage card. Then repeat for each attack of the minion.

5.Minion Spawn

Minion will be built in every Spawn Tile. By click at the tile.

How the games end

This Game will end when your health 0 left.

Class diagram

Project Overview

1. Package application

1.1 Class DrawUtil

1.1.1 Fields

-String TilePath	Load Image "TileSprite.png" from Resource
-Image TileSprite	Create Image TilePath
-String CardPath	Load Image "CardSprite.png" from Resource
-Image CardSprite	Create Image CardPath
-String PhasePath	Load Image "PhaseSprite.png" from Resource
-Image PhaseSprinte	Create Image PhasePath
-String SelectedCardPath	Load Image "selectCard.png" from Resource
-Image SlectedCardSprite	Create Image SelectedCardPath

1.1.2 Methods

+void drawTile(GraphicsContext gc, int x, int y, int index)	Draw Tile
+void drawCard(GraphicsContext gc, int x, int y, int index)	Draw Card
+void drawPhase(GraphicsContext gc, int x, int y, int index)	Draw Phase

1.2 Class Main

1.2.1 Fields

Scene firstScene	Is first Scene of Primary Stage
Stage window	Is primaryStage
ImageView Tu	ImageView of Tutorial Scene
Int pageTutorial	Current Page Index of tutorial

1.2.2 Methods

+void start(Stage primaryStage)	Set Scene and create another button in firstScene
+Scene tutorialGame()	Return scene that tutorial this Game
+Scene createGameScene()	Return scene playGame
+void main(String[] args)	Start Program
+VBox drawUpRight()	Return VBox upright in playGame Scene
+Stage getWindow	Return window

2. Package card.base

2.1 Interface Attack

2.1.1 Method

+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack

2.2 Interface Move

2.2.1 Method

+ArrayList<Object> move(int tier)	Return ArrayList of tile that can move

2.3 Interface Rotate

2.3.1 Method

+ArrayList<Object> rotate(int tier)	Return ArrayList of Direction that can rotate

2.4 Interface OnGoing

2.4.1 Method

+void execute(int tier)	Execute

2.5 Interface Instant

2.5.1 Method

+void trigger()	Tringger

2.6 Abstract Class CmdCard

2.6.1 Fields

-String cardType	Type of Card
-Mech programmedMech	Current mech that programmed
#int spriteValue	Keep SpriteValue
-CmdBox cmdBox	CmdBox that keep this cmdCard

2.6.2 Methods

+abstract void setSpriteVale	Set Sprite Value
Setter/getter	Get and set for ech fields

3. Package cmdcard

3.1 Class BlueAttackCard
> Extends: CmdCard
> Implements: Attack,OnGoing

3.1.1 Method

+BlueAttackCard()	setSpriteValue
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.2 Class BlueMoveCard

extends CmdCard
Implements Attack,Move,OnGoing

3.2.1 Method

+ BlueMoveCard()	setSpriteValue
+ArrayList<Object> move(int tier)	Return ArrayList of tile that can move
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.3 Class BlueRotateCard

extends CmdCard
Implements Attack,Rotate,OnGoing

3.3.1 Method

+ BlueRotateCard()	setSpriteValue
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+ArrayList<Object> rotate(int tier)	Return ArrayList of Direction that can rotate
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.4 Class GreenAttackCard

extends CmdCard
Implements Attack,OnGoing

3.4.1 Method

+ GreenAttackCard()	setSpriteValue
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.5 Class GreenMoveCard

extends CmdCard
Implements Move,OnGoing

3.5.1 Method

+ GreenMoveCard()	setSpriteValue
+ArrayList<Object> move(int tier)	Return ArrayList of tile that can move
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.6 Class GreenRotateCard

extends CmdCard
Implements Attack,Rotate,OnGoing

3.6.1 Method

+ GreenRotateCard()	setSpriteValue
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+ArrayList<Object> rotate(int tier)	Return ArrayList of Direction that can rotate
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.7 Class RedAttackCard

extends CmdCard
Implements Attack,OnGoing

3.7.1 Method

+RedAttackCard()	setSpriteValue
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.8 Class RedMoveCard

extends CmdCard
Implements Attack,Move,OnGoing

3.8.1 Method

+RedMoveCard()	setSpriteValue
+ArrayList<Object> move(int tier)	Return ArrayList of tile that can move
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.9 Class RedRotateCard

extends CmdCard
Implements Attack,Rotate,OnGoing

3.9.1 Method

+ RedRotateCard()	setSpriteValue
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+ArrayList<Object> rotate(int tier)	Return ArrayList of Direction that can rotate
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.10 Class YellowAttackCard

extends CmdCard
Implements Attack,OnGoing

3.10.1 Method

+YellowAttackCard()	setSpriteValue
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.11 Class YellowMoveCard

extends CmdCard
Implements Attack, Move,OnGoing

3.11.1 Method

+YellwMoveCard()	setSpriteValue
+ArrayList<Object> move(int tier)	Return ArrayList of tile that can move
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

3.12 Class YellowRotateCard

extends CmdCard
Implements Attack,Rotate,OnGoing

3.12.1 Method

+YellowRotateCard()	setSpriteValue
+ArrayList<Object> attack(int tier)	Return ArrayList of Token that can attack
+ArrayList<Object> rotate(int tier)	Return ArrayList of Direction that can rotate
+void execute(int tier)	Set game controller to be ready use this card
+void setSpriteVale	SetSpriteValue follow tier

4. Package damagecard

4.1 Class BackMoveCard

extends CmdCard
Implements OnGoing

4.1.1 Fields

-Direction dir	Keep direction Down

4.1.2 Methods

+BackMoveCard()	Set direction,set sprite value,set programmedMech,set Card Type
+void execute(int tier)	Set game controller to be ready use this card

4.2 Class ForwardMoveCard

extends CmdCard
Implements OnGoing

4.2.1 Fields

Direction dir	Keep direction up

4.2.2 Methods

+ForwardMoveCard	Set direction,set sprite value,set programmedMech,set Card Type
+void execute(int tier)	Set game controller to be ready use this card

4.3 Class LeftMoveCard

extends CmdCard
Implements OnGoing

4.3.1 Fields

Direction dir	Keep direction Left

4.3.2 Methods

+LeftMoveCard	Set direction,set sprite value,set programmedMech,set Card Type
+void execute(int tier)	Set game controller to be ready use this card

4.4 Class **RigthMoveCard**

extends CmdCard
Implements OnGoing

4.4.1 Fields

Direction dir	Keep direction Right

4.4.2 Methods

+RightMoveCard	Set direction,set sprite value,set programmedMech,set Card Type
+void execute(int tier)	Set game controller to be ready use this card

4.5 Class **Swap12Card**

extends CmdCard
Implements Instant

4.5.1 Methods

+Swap12Card()	set sprite value,set programmedMech
+void trigger()	Reverse cmdCard in cmdBoard

4.6 Class **Swap34Card**

extends CmdCard
Implements Instant

4.6.1 Methods

+Swap34Card()	set sprite value,set programmedMech
+void trigger()	Reverse cmdCard in cmdBoard

4.7 Class **Swap56Card**

extends CmdCard
Implements Instant

4.7.1 Methods

+Swap56Card()	set sprite value,set programmedMech
+void trigger()	Reverse cmdCard in cmdBoard

4.8 Class **reverseCard**

extends CmdCard
Implements Instant

4.8.1 Methods

+reverseCard()	set sprite value,set programmedMech
+void trigger()	Reverse cmdCard in cmdBoard

4.9 Class **Rotate90Card**

extends CmdCard
Implements OnGoing

4.9.1 Methods

+Rotate90Card()	set sprite value,set programmedMech,set Card Type
+void execute(int tier)	Set game controller to be ready use this card

4.10 Class **Rotate180Card**

extends CmdCard
Implements OnGoing

4.10.2 Methods

+Rotate180Card()	set sprite value,set programmedMech,set Card Type
+void execute(int tier)	Set game controller to be ready use this card

4.11 Class Rotate270Card

extends CmdCard
Implements OnGoing

4.11.2 Methods

+Rotate270Card()	set sprite value,set programmedMech,set Card Type
+void execute(int tier)	Set game controller to be ready use this card

5. Package exception

5.1 Class SelectMechException

extends Exception

5.1.1 Fields

+String message	Keep Message to notice

5.1.2 Methods

+ SelectMechException(Mech selectedMech)	Set Message red mech or blue mech

6. Package gui

6.1 class CardPane

extends VBox

6.1.1 Fields

-CmdCard selectedCard	Card that being show
-Label textLabel	Card Name
-Canvas cardCanvas	Canvas for drawing Card Image
-Label description Label	Description for the Card
-Button triggerButton	Trigger the effect of damage (either add that card to the CmdBoard or trigger the effect)

6.1.2 Methods

+CardPane()	Construct adjust the location and creat everything all object
+void setDmgCard(CmdCard damageCard)	Make caedPane show the damage card and make the button enable and adjust to the type of damageCard
+void ShowingCard(CmdCard showingCard)	Make cardPane show the cmdCard
+void setTextLabel(CmdCard showingCard)	Adjust the textLabel to show the name of the Card
+ void setImage(CmdCard showingCard)	Draw the canvas for the card
+ void setDescription(CmdCard showingCard)	Adjust the descriptionLabel to show the effect of the Card
+ CmdCard getSelectedCard()	Return the card that showing

6.2 class ScorePane
extends HBox

6.2.1 Fields

- Canvas scoreCanvas	Canvas for drawing the current Phase

6.2.2 Methods

+ ScorePane()	Construct and draw the canvas
+ void drawScore()	Draw the canvas to update the current score

6.3 class HealthPane

extends HBox

6.3.1 Fields

- Canvas healthCanvas	Canvas for drawing the remaining Health

6.3.2 Methods

+HealthPane()	Construct and draw the canvas
+ void drawHealth()	Draw the canvas to update the remaining health

6.4 class PhasePane

extends HBox

6.4.1 Fields

- Canvas phaseCanvas	Canvas for drawing the current Phase

6.4.1 Methods

+PhasePane()	Construct and draw the canvas
+ void drawPhase()	Draw the canvas to update the current phase

6.5 class DirectionPane
extends HBox

6.5.1 Fields

- ArrayList<Canvas> directionCanvas	Arraylist that keep all canvas to draw the direction button
- ArrayList<Button> directionButton	ArrayList that keep all button

6.5.1 Methods

+DirectionPane()	Construct adjust the location and creat everything all button and set the button
+ void drawDirection()	Draw the canvas on all button
+ void drawSelectableDirection(Direction dir)	Draw the canvas on the button that be able to be selected

6.6 class EndGamePane
extends HBox

6.6.1 Fields

- GridPane scoreGridPane	GridPane for showing rank and score
-TextField nameInput;	TextField to let player enter the name
-ArrayList<Integer> scoreList	List of the score from the file
-ArrayList<Integer> topScoreList	List of all the top score(no duplicate)
-ArrayList<Integer> amountList	Amount of the people who get score from the same index in topScoreList
- ArrayList<Integer> sortedScoreList	List of the score from the file that being sorted
-ArrayList<String> nameList	List of the name from the file
-ArrayList<String> topNameList	List of the name in top 10

6.6.1 Methods

+endGamePane()	Construct create all header score on the top and text field
+ void getTopScore()	Read the score from the file txt and creat the topScoreList and topNameList
+ int getRank()	Check the rank of the current player
+ void setTopScore(int rank)	If player is in top 10 make the Label content bind with text field
+ void saveNewScore(String Name)	Write the name and the score of the new player to the file

7. Package logic

7.1 Enum Direction
This Enum represents direction. It contains the following values: LEFT, RIGHT, UP, DOWN,All

7.2 Enum Phase
This Enum represents Phase of the game. It contains the following values: Draft, Program, Execute, Minion Move, Minion Spawn, Minion Attack

7.3 class CardSpirte
This class store all the value for creating card sprite

7.4 class TileSprite
This class store all the value for creating tile sprite

7.5 class Board

extends GridPane

7.5.1 Fields

- final int BOARDSIZEX	Size of the board in x axis (10 tiles)
- final int BOARDSIZEY	Size of the board in y axis (10 tiles)
- ArrayList<ArrayList<Tile>> tileBoard	List that kept all the tile in board
- ArrayList<SpawnTile> spawnTileList	List that kept all the spawn tile in the board
- ArrayList<Minion> minionList	List that kept all the minion in the board

7.5.2 Methods

+ Board()	Construct create all tile and put in position in grid and in the list
+ Tile getTile(int x, int y)	Return the tile at location x, y
+ Tile setTile(int x, int y, Tile newTile)	Set tile in location x, y to be the new tile
+ ArrayList<Tile> getAdjacentTile(Tile tile, int range, Direction dir)	Get the tile in horizontal and vertical that in the range of the direction
+ ArrayList<Tile> getDiagonalTile(Tile tile, int range, Direction dir)	Get the tile diagonal that in the range of the direction(if UP means return up+left, up+right)
+ ArrayList<Tile> getBorder(Tile tile, int range)	Return all tile in horizontal, vertical and diagonal in the range
+ Boolean isMovePossible(int x, int y)	Check if x, y is still in the board
+ boolean isSpecial(int x, int y)	Check if tile in location x, y is a special or not
+ void clearSelectable()	Make all "selectable" in all tile to be fault
Getter for minionList and spawnTileList	

7.6 class CmdBox

extends Button

7.6.1 Fields

- ArrayList<CmdCard> cmdCardList	List that kept all the card in this box
- - Mech programmedMech	The mech that connect to this cmdBox
- - Canvas cmdCanvas	Canvas for the card in this box

7.6.2 Method

+ CmdBox(int slot)	Construct for CmdBox in DraftedCard Make it click to select cmdCard, when move the mouse over make the cardPane show the card in this box, and be able to start the drag.
+ CmdBox(Mech programmedMech)	Construct for CmdBox in CmdBaord of the mech Make it click to select CmdBox , when move the mouse over make the cardPane show the card in this box, and be able show the result of the drag when dragging over, and set program when the drag drop.
+ void addCmdCard(CmdCard selectedCard)	Add the card to the list if the card that in box and the selected is not the same type clear out the card.
+void addDamageCard(CmdCard damageCard)	Clear the card list and add the damage Card
+ void drawCanvas(boolean selected)	Draw the card on the canvas if it's selected also draw the selected_card Sprite.
Getter/setter	Getter and setter for cmdCardList, cmdCanvas, programmedMech

7.7 class CmdBoard

extends HBox

7.7.1 Fields

- ArrayList<CmdBox> cmdBoxList	List kept all 6 cmdBox

7.7.2 Method

+ CmdBoard(Mech programmedMech)	Construct for CmdBoard Create all cmdBox and add to the list
+ void setSelectedCmdBox(CmdBox SelectedCmdBox)	draw all the cmdBox only selectedCmdBox draw selected_card
+ void setDisableSlot(boolean disable)	Enable or disable all cmdBox
+ void draw()	Draw all the card without selected
+ CmdBox getCmdBox(int slot)	Get the cmdBox in the index slot of cmdBoxlist
void setCmdBox(int slot, CmdBox cmdBox)	Copy all the card in cmdBox to the cmdBox in the index slot of cmdBoxlist

7.8 class DraftedCard

extends HBox

7.8.1 Fields

- ArrayList<CmdCard> draftedCardList	List kept all 6 cmdCard
- ArrayList<CmdBox> draftedBoxList	List kept all 6 cmdBox

7.8.2 Mehods

+ DraftedCard()	Construct for DraftedCard Random all the card and add to draftedCardList then creat all cmdBox and add the card to it
+ void setSelectedDraftedCard(boolean selectCard)	draw all the cmdBox if there is selectedCard draw selected_card on that CmdBox
+ CmdCard randomCard()	Random 1 cmdCard from 12
+ ArrayList<CmdCard> getDraftedCardList()	Return draftedCardList
+ void remove(int slot)	Set the index slot of draftedCardList to be null
+ void setDisableButton(boolean disable)	Enable or disable all cmdBox

7.9 class GameController

7.9.1 Fields

- static Board board;	GameBoard
- static Mech redMech	Red Mech
- static Mech blueMech	Blue Mech
- static Phase currentPhase	Current phase of the game
- static int turnCount	How many turn has passed
- static int score	score
- static int damageCount;	How many damage that mech has been taken
- static int selectedCard	Slot of the selectedCard in draftedCard
- static CmdBox selectedCmdBox	Selected CmdBox
- static StackPane gamePane	Whole screen that have the board, cmdBoard, scorePane, phasePane, directionPane, healthPane, draftedCard and CardPane
- static PhasePane phasePane	The pane that show current Phase
- static DirectionPane directionPane	The pane that show all direction button
- static HealthPane healthPane	The pane that show the remaining health
- static ScorePane scorePane	The pane that show the current score
- static CardPane cardPane	The pane that show the effect of the card that being selected, mouse moving over , being dragged or the damageCard that have to take.
- static DraftedCard draftedCard	The Pane that show all draftedCard

- static int programCount	Keep track of what cmdCard is executing
- static ArrayList<Object> selectable	All the selectable object that player have to choose
- static int selectTimes	How many thing the player have to choose
- static CmdCard executingProgram	What cmdCard are executing
- static Direction movingDirection	What direction the mech is moving
- static int stepCount	How many step have the mech move

7.9.2 Method

+ static initializeGame()	Create the game board, redMech, blueMech, set CurrentPhase, turn, score, programCount, and create all the pane.
+ static void initializeBoard()	Creat the board and make the special tile
+ static void randomTile()	Random 1 specialTile from 4 type
+ static void creatSpawnTile()	Create the spawnTile at random location
+ static void nextPhase()	Change the currentPhase variable and reset value of variable for each phase
+ static void minionMove(Direction dir)	Make all minion move in that direction
+ static void setProgram(CmdBox selectedCmdBox, int selectedDraftedCard)	Set the selectedDraftedCard to the selectedCmdBox If the mech already set 2 program throws selectMechException If both mechs already set 2 program go to the next phase
+ static boolean move(Token selectedToken, Direction dir)	Move the token in the dir direction

+ static void select(Object selectedObject)	Doing things when player select the object depending on the executingProgram
+ static void execute(int programCount)	Execute the cmdCard on the programCount slot of mech
+ static void addDamgeCount()	Add 1 to damage count if damage count equal 10 call endgame function and update healthPane
+ static void addScore()	Add 1 to the score and update scorePane
+ static void setSelectedCard(int selectedCard)	Set selectedCard and if seletedCmdBox is not null set program
+ static void setSelectedSlot(CmdBox selectedCmdBox)	Set seletedCmdBox and if seletedCard is not 6 set program
Getter/setter	

8. Package tile

8.1 class Tile
extends Pane

8.1.1 Fields

- int locationX	Position of the tile in x axis
- int locationY	Position of the tile in y axis
- int spriteValue	Normal tile sprite value
- Canvas tileCanvas	Canvas for draw the tile
# Token token	Token on the tile
# boolean selectable	Value that show tile selectable or not
# boolean selectToken	Value that show select tile or token on the tile

8.1.2 Methods

+ Tile(int locationX, int locationY)	Create tile set spriteValue add set on mouse click
Getter/setter	

8.2 class ExplosiveTile
extends Tile

8.2.1 Method

+ ExplosiveTile(int locationX, int locationY)	Create tile and set spriteValue
+ void trigger()	Damage all minion in border range 1

8.3 class MoveTile

extends Tile

8.3.1 Fields

- Direction dir	Direction of the move when token step on it

8.3.2 Method

+ ExplosiveTile(int locationX, int locationY)	Create tile, random direction and set spriteValue
+ void trigger()	Make token that step on it move in the dir direction

8.4 class SlipTile

extends Tile

8.4.1 Method

+ SlipTile(int locationX, int locationY)	Create tile, and set spriteValue

8.5 class SpinTile

extends Tile

8.5.1 Fields

- int spinValue	Degree that token have to rotate

8.5.2 Method

+ SpinTile(int locationX, int locationY)	Create tile, random spinValue and set spriteValue
+ void trigger()	Make token that step on it rotate

8.5 class SpawnTile
extends Tile

8.5.1 Method

+ SpawnTile(int locationX, int locationY)	Create tile and set on mouse click to spawn
+ spawn()	Create new minion on the tile

9. Package token

9.1 Abstract class Token

9.1.1 Fields

- Direction dir	Degree that token have to rotate
- Tile selfTile	Tile that token on
- int spriteValue	Sprite for mech

9.1.2 Method

+ Token(Direction dir, Tile selfTile)	Set selfTile direction and set token in tile
+ abstract void damaged()	When get damaged
Getter/setter	

9.2 class Mech

extends Token

9.2.1 Fields

- CmdBoard cmdBoard;	CmdBoard of the mech
- int programedCount	How many program is setted in this phase
- int attackedTimes	How many times it has to be attacked
- int no	0 for redMech and 1 for blueMech

9.2.1 Method

+ Mech(Direction dir, Tile selfTile, int no)	Set SpriteValue and creat CmdBoard
+ void damaged()	When get damaged creat damage to show in cardPane and have to click trigger
Getter/setter	

9.3 class Minion

extends Token

9.3.1 Fields

- Boolean move	Check if it already move this turn

9.3.2 Methods

+ Minion(Direction dir, Tile selfTile, int no)	Create and add it to minion list in board
+ void damaged()	Remove from list and tile then add the score
+ ArrayList<Token> attack()	Add attackedTimes to the mech in the border
Getter/setter	