

mainWindow		
Handles all the elements on the screen and the initial setup for the game.	Handles connect statements and window organization.	Creates the connections of all the buttons in the UI with slots that perform the desired response.

cell	calls	
Cell(QColor status, const int x, const int y)	Creates the object of the cell with the specific coordinate and status (dead or alive)	
mousePressEvent(QGraphicsSceneMouseEvent *event)	Changes the color of the cell when the cell is clicked.	Can handle color change withing the event or emit a signal to a slot to handle it or even call a function
boundingRect() const	Used to set where is this object located	
shape() const	Defines the actual shape of the object	
paint(QPainter *painter, const QStyleOptionGraphicsItem *option, QWidget *widget)	Draws and paint the object in the view	
Fields/Attributes:	int x_ int y_ int const width_ = 20; QColor status_ QColor next_status_	Coordinates Size Dead or alive Next turn status

GameOfLife		Call/signal
Handles start, step, turn, pause, population	Keeps track of the fields and attributes that change each turn	
		gameEnds(bool ok);
Void playGame()	Handles clicking “play” button	slot
Void pauseGame()	Handles clicking “pause” button	slot
Void stepGame()	Handles clicking “step” button	slot
Void setSpeed()		slot
Fields/Attributes	Int population Double pop_percentage Int turn Double speed	

Graph		
Handles the graph items		
Graph(int height, int position)	Creates the object of the graph with the specific height and position (width should be constant)	
Void takeTurn()	Moves the bars to the left and add more bars	
Fields/Attributes	Int height_ Int const width_ Int position_	

UI	Type	Signal to slot
Turn	QLabel	
Population		
view	QGraphicsView	
Step	QPushButton	On clicked() connect to stepGame()
Play		On clicked() connect to playGame()
Pause		On clicked() connect to pauseGame()
slider	QSlider	On clicked() connect to setSpeed()