**Final Report - Minesweeper**

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**Major developments/breakthroughs(reference specific code please):**

* discovered how to load an image onto a JButton from the correct source so that from any computer the image will be accessible as long as the image is in the correct file

ImageIcon img = new ImageIcon("F:\\Ray's Graphics Report - Minesweeper\\MineSweeper Development\\Happy Face.jpg");//Incorrect, changed to

ImageIcon img = new ImageIcon("Happy Face.jpg");//correct

* use of border layout, early versions did not use border layout

add(panTop, BorderLayout.NORTH);

add(grid, BorderLayout.CENTER);

add(panBottom, BorderLayout.SOUTH);

* discovered how to set up random numbers of bombs

randomNum = rand.nextInt((max - min) + 1) + min;

**Major Challenges/setbacks( reference specific code please):**

* Proper set up of JFrame and JPanels were not considered, could not connect a panel to a frame

public TopPanel(){

setLayout(new BorderLayout());

setBackground(Color.yellow);

setSize(500, 100);}

add(panTop,BorderLayout.NORTH);//attempting to add the panel ,similar to current version, but did not run properly, the yellow panel at the top would not show, had trouble setting up the panel while having a borderlayout of it at the top, currently still unsure of proper method

**Any modifications to your planned steps:**

* split up first step, removed all fix bugs, was trying to achieve too much in one step, also did not plan to finish the game, realized it would be too difficult, did not know enough about GUI to complete this project