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EE104

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Lab 9 Documentation

I will go over the Risk Factor Identification and Trend prediction model, and the dance game briefly in this documentation.

I understand that banks must detect risk variables linked with loan applicants in order to allocate the proper loan interest or decline the applications. To the original table, add a new column to show the risk factor level of HIGH, MED, or LOW. The figure below will show the risk factor level

A screenshot of a computer

Description automatically generated with medium confidence

The data is being collected from 1/1/2022 to 6/30/2022, for a total of six months. I used numpy.polyfit to do the curve-fitting and predict the total number of COVID-19 cases. First, load all of the functions that we may require, then read the.csv file and do the curve fit on the data. Finally, we can write a function and plot it. The outcome will be a prediction of the original data we started with.

A screen shot of a computer program

Description automatically generated with medium confidence

There are too much data of date on the x-label, so the figure we plotted will be a bit weird.

Note: the thin blue line is the prediction trend of the original data.

A picture containing text, screenshot, diagram, plot

Description automatically generated

Finally, we will go over and explain the game part. The game for lab 9 is about developing a dancing game. Players can control the little person in the game by using the arrow keys and the W A S D keys. The music was modified, the dance period was extended, and PVP was added to the game.

The game is a turn-based system in which player 1 concludes and player 2 takes over; if both participants pass the same stage, the next stage requires additional actions.

**A picture containing funnel chart

Description automatically generated**

If player 1 or player 2 fails, the game ends. The end page will show who wins based on who has the highest score.

**Diagram

Description automatically generated**

If the game ends with the same score, a tie will be shown below:

**A picture containing diagram

Description automatically generated**

GitHub link to code:

Trend Prediction and Risk Factor youtube link: <https://youtu.be/fUx7rcrzagc>

Dance game youtube link: <https://youtu.be/Sp-an-K2V6E>