**Artificial Intelligence – *Project 4 Report***

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**Algorithm Choice**

In this project, I used JAVA implemented Hidden Markov Model (HMM) algorithms to solve Customer Journey problem. Using probability data available on project description, value for stage transformation and emission-stage relation are pre stored in the program. By reading the 40 rows of emission data from the input file, the possible state for each time frame can be calculated and recorded. For input file with validation section, the program will evaluate the calculated result with give validation.

**Problem**

We are given a file which contains information about a customer’s behavior within 40-time frames. We need to read those files and calculate possible states with given probability. Then, we apply our Algorithms and print desired outputs and performance measures.

**How to run script**

The program first asks to input the file name to determine which file are used. After storing info into workable data structure, it will run the HMMs on the given data and time the program. Finally, it will show the print the possible states sequence and run time.

电脑萤幕的截图

描述已自动生成