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**Problem Description Write-Up**

**Project: Mass Lotto Under a Microscope**

**Purpose of Project:** This web app is specifically designed for users to view a dashboard built for comparative statistics using a database of stored winning numbers for the Mass Lottery. They would be able to review different frequency graphs based on past winning numbers over various time intervals. The reason for this project is to help users make more of an educated guess, and possibly leading them to creating their own algorithms in solving an age-old riddle; is the lottery really a randomized game, and just how randomized is it?

**Concept:** The flow of the process is to write a Python program which will serve as the parser to download the data from Mass Lottery winning numbers daily. Currently, due to the size of storage involved, AWS DynamoDB is considered as well as MySQL. The job will be scheduled also daily to pull the data in a consistent manner. Then Bootstrap HTML and CSS will be used to construct the seven webpages, that will allow users to interact with going from ‘Home’ to ‘Login’, ‘Newuser’, ‘Dashboard’,’Statistics’, ‘Payment’, and ‘Contact’.

**User Personas:** The users will generally be varied in age. Since the database is only based on Mass Lottery, expected users will be older than 18. This is the designated legal age to purchase lottery tickets. Most likely, the users logging in and viewing the dashboard will also be in the similar age range. The three chosen personas I have used will vary in age. Although the three personas chosen all vary in age and background, they have a basic similarity of saving more money, and are all interested in either paying off some bills, loans, or want to help family members more in a financial sense. Therefore, they are the ideal personas for this project.

**Other Benefits to Project:** The project is interesting in another way, because the idea can always be expanded to much larger lottery systems in the future. Further still, if in the future a new database is created to store the login information which includes not only demographics, age, sex, and geographic location; this would be a good opportunity for the government to find out the different needs of the general population. Companies would also find the data valuable to determine the lottery markets, and how they are divided among the demographics.

**Costs of the Project:** The web application and parser being developed is to serve the public. Donation page is created to provide some funding to the webpage. However, the incentive is to have the users create the log on and input their information. The donation proceeds would be non-profit. However, the data behind the users would be very interesting to dissect, and this will be the main source of capitalization. I believe this will be a

**How Project Solves Users’ Problems:** The web application will hopefully help users choose more desired numbers. These numbers may hold a greater chance of being picked as winning numbers in the Mass Lottery system. This would help them fund their financial goals. There would also be other users and possibly lottery organizations who will be interested to understand patterns on the dashboard and statistics. Leaving the comment section on the ‘Statistics’ page, it may prompt other users to submit improved methodologies to randomized number selections.