

### Problem no 1: -

Mumbai University Provides grants (in terms of money) which is allocated to it through Government of India. Every year GOI funds MU with 10 cr for smart Developments in various fields through student's initiative. Colleges under Mumbai university comes under 4 zones (East, West, North, South). Every Zone have nearly 150 colleges under it. MU divides the funds initially in the equal amounts to all zones. After every year fund utilization report is generated and after every 2 years depending on the utilization of the fund from certain zone MU takes an action and modify the allocated amount to every zone. Same process takes in the second hierarchy that is the number of colleges in particular zone. Even for every college initially available funds are same and after every 2 consecutive years depending utilization of fund it is modified. Maintaining track all this records manually in the file system is a big problem faced by MU.

You are supposed to generate a responsive dashboard which provides MU track of the fund utilization and also provides suggestion about fund modification. The system should also provide the complete track record firstly the zone wise utilization and then college wise utilizations of funds.

You may assume any data for same or generate the dataset.

System needs at least 3 logins 1 for admin, 1 for a particular college and 1 for MU

**Additional Task:** You may also provide a prediction module which will provide an intimation of what can be scenario in next year depending on the previous trends. Considering data for last 10 years.

## Problem no 2:-

India is an educational hub; every year crores of students get graduate from various streams. Students not only from India but from certain other countries (Foreign Countries) like China, Nigeria etc. also get their degrees from India. These students which comes from other countries comes on educational visa. But due to some reason if any candidate has to spend more time apart from the allocated time in visa (year drops due to underperformance or medical issues). Such students many time forgot to update their visa, staying in other countries without visa is an illegal issue. Government of India faces a problem to keep track of all such students.

An automated system can be a solution which tracks every foreign student with various parameters like personal details, location where he stays, Due date of visa, college where he has enrolled for the course etc., System should provide alert to these students at least a month before to update their visa. Alerts may also send to local police station in which that student reside, college in which that student study, Foreign Embassy from where the student belongs. After getting alert if the student still do not provide any respond then police should be able to track the student and do the needful.

### Problem no 3:

Daily a new News channel is coming in the market in some channel one news is shown whereas in other channels some other news is shown many a time same news sounds different on different news channel, recently many of the news channels have started with their online channels where facilities like e-newspapers is also provided. No of people use this e-newspaper but again reading a lengthy news is a time consuming task and sometimes boring, many times a complete page have only two or three lines of information. A standardized solution is needed where on a single platform where user can get all news depending on his/ her choice and also in summarized manner. Also a strategy is needed which will provide the user correct news and not a fake news.

#### Problem no 4: -

Share market is a craziest place where a person who knows the strategy to deal with buy/sell shares will survive in the market whereas the person who don't have knowledge and has a greedy behaviour may many a times may lose. Hiring a broker may lead to distribute the achievable profit also people may have less confidence when it comes to handover money to someone for trading. Common man has many false myths regarding trading and hence many consider it as a wrong way to get earn money or may be sin for few others. A standardized solution/ system is needed which provide a complete detail and prediction of the shares which a user can go for it may depend on certain factors like the company profile, opening and closing price etc.,