Feasibility Analysis

CS-08

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Revision History

Name	Date	Reason For Changes	Version
Nikhil Sachan	18/08/2018	Initial Document	1.0

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Ideas

1. PG Finder
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1. PG Finder

The main objective of the project is to develop an application that provides PG's information regarding the location, facilities, price, and maps.

Economical:

a) Similar models like OYO and magic bricks will be helpful.
b) Fieldwork required to retrieve the data of PG slots.
c) The time required for the development of software – approx 6 weeks, and for debugging, testing and final documentation- approx 2 weeks.
d) The advertisement is required.

Technical:

a) Deployment on a server which can create problems such as data storage.
b) The platforms which can be used- JS (react.js, node.js), AWS
c) React, AWS and Node Documentation.

Legal:

a) Everything we can use for the development of software is available Open Source.
b) We will have to get a proper legal contract for the PG.

Status - Rejected

Reason - The amount of fieldwork required along with the legal issues make this project infeasible.

2.Old Books

Old Books selling platform with an open channel for endorsing products. It provides a platform for people to sell and buy books.

Economical:

a) Data Accumulation will be high after a while, will be hard to manage.
b) The time required for the development of software – approx 5 weeks, and for debugging, testing and final documentation- approx 2 weeks.
c) Fieldwork is minimal.
d) The advertisement is required.

Technical:

a) The platforms which can be used- JS (react.js, node.js), AWS.
b) Channel for communication between buyers and sellers.
c) React, AWS and Node Documentation.

Legal:

a) Proof of ownership is required for the sellers.
b) Everything we can use for the development of software is available Open Source.

Status: Rejected

Reason: We will need to verify the right of ownership for the sellers of the books.

3. **Automated Timetable Generator**

This project tries to find a solution to the school timetabling problem. The timetabling problem involves scheduling a number of tuples, each consisting of a class of students, a teacher, a subject, to a fixed number of time slots. A number of such tuples may be scheduled in the same time slot providing no class, a teacher appears more than once in the time slot.

Economical:

a) Decent scope as it saves time for the faculties and the person making the timetable.
b) Required data for this software is the number of subjects, number of faculties, number of working days, time slots per day, availability of faculties, classroom availability.

c) Time constraints-
   i) UI- approx 3 weeks
   ii) Generating and implementation of the algorithm- approx 2 weeks
   iii) Testing and Debugging- approx 2 weeks
d) Optimal Solution can't be determined because it is NP-Hard problem, so we can find a solution which will be close to the optimal solution.

Technical:

a) The platforms we can work on- JS (react.js, node.js), AWS (for data storage).
b) React, AWS and Node Documentation.
c) Can be deployed on the institutes' local network (no cloud hosting required in this case).

Legal:

a) Everything we can use for the development of software is available Open Source.

b) No legal issues like proof of ownership as in the case of "Used Books".

Status - Selected

Reason - No major legal issues. No contracts required with any party (As in the case of PG Finder). Moreover, the target population of the project surveys (College Faculties and Management) is readily approachable.

4. Elective Course Reviews

Unofficial Portal for students to publically review the elective courses they have studied and guiding the junior batches to make a choice.

Economical:

a) Reviews about the elective subjects offered in colleges to help students to make a better choice.
b) Time constraints- UI (approx 3 weeks) and data collection (approx 1 week) , testing and debugging: approx 2 weeks.

Technical:

a) Platform: Platform we can work on- JS (react.js, node.js), AWS (for data storage).
b) Availability of React, AWS and Node Documentation.

Legal:

a) Everything we can use for the development of software is available Open Source.
b) No legal issues like proof of ownership as in the case of “Used Books”.

Status: Rejected

Reason: Can’t verify whether the review given is genuine or not. Abusive content can be posted in comments.

5. Online Library System

To manage the status of each book available in Library and providing e-books.

Economical:

a) The conversion of “paper” books to pdf will be technically challenging.
b) All the ebooks will be available online.
c) The free online ebooks will provide a significant monetary advantage to students.
d) The time required for the development of software – approx 6 weeks, and for debugging, testing and final documentation- approx 2 weeks.

Technical:

a) The platforms we can work on- JS (react.js, node.js), AWS (for data storage).
b) React, AWS and Node Documentation.
c) Can be deployed on the institutes' local network (no cloud hosting required in this case).

Legal:

a) Legal issues like copyright in the case of “Online Available e-Books”.
b) Everything we will use for the development of software is available Open Source.

Status: Rejected

Reason: Need to verify the copyright issues for each soft-copy we will provide, and also can't provide the soft copy of every book which is not available.