Project Description

Team #02: Athenos

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1 Problem Statement

Creating a platform where students[1] can get all study materials, i.e. topic overview, video lectures, open source e-books and projects at same place.

2 Need to tackle this problem

Every student who enters in a domain which is completely new to him/her, he faces a problem of finding relevant study materials. He/she can easily find study materials, but it is very difficult to separate relevant study materials from it. Also, additional effort and time is required to do so, which can be applied in some productive work, if one gets relevant materials in the first place.

3 Statistics

In above section, we have intuitively given the reason to tackle the problem. However, an intuition is relevant only if it is backed by some facts. In this section, we are going to describe the results of our requirement analysis.

We did requirement analysis on a sample of 130 students. Following data was collected:-

- Figure 1 gives the data of learning methods preferred by students. It can be seen that video lectures and books are preferred over projects and notes. Also, number of people who prefer projects is large, hence, we decided to keep it too.

- Figure 2 gives the data of how often people get diverted when they search for a topic[2]. It can be seen that most people are diverted either regularly

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[1] By students, we mean everyone who is curious to learn something
[2] relevant study materials

Figure 1: Methods for learning purpose

Figure 2: Diversion of people while searching for relevant study material.

Figure 3: Data for all learning means at same place.

or sometimes. Keeping a single platform for learning will restrict their diversion.

- Figure 3 gives the data of people who want all their learning means at single place. It can be clearly seen that majority of them want such platform.

- Figure 4 gives the data of time spent by people while searching relevant study materials. Approx. 65% of them spent at least 15 minutes for this task.

Above points justify the need of having a platform where all learning means are at one place.

Now, we will do individual analysis of data collected for each feature[3] and justify their presence in our solution.

- **Video lectures**: Figure 5 gives the data of people who find relevant video lectures in first search. It can be seen that approx. 55% people can't find relevant search results frequently. This justifies the need of having a section dedicated to relevant video lectures.

- **Books**: Figure 6 gives the data of people who find relevant books easily. It can be seen that for approx. 42% people, it is difficult to find relevant books easily[4]. This justifies the need of having a section dedicated to books.

- **Projects**: Figure 7 gives the data of people who are interested in contributing to other projects. It can be seen that for 56.3% people are interested in contributing to other's project.

  Figure 8 gives the data of people who are able to search for a desired projects on Github. It can be seen that 18.5% of people never find the desired projects and 61.5% of people only sometimes find the desired projects.

  These reasons justify for having a section dedicated to Github.

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[3]topic overview, video lectures, books, projects and notes
[4]Assuming that people who have rated up to 6 find it difficult to find relevant book.

Figure 4: Time spent on searching for a study material.

Figure 5: Data for finding relevant video lectures on Youtube in first search.

Figure 6: Data for easily finding relevant books

4 Solution

- Creating a web and android application which have dedicated sections for video lectures, books and projects.

- Having balanced resources to download and render the web page, so that performance [5] and quality [6] both remain above a certain benchmark.

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[5]With large resources for downloads, it becomes difficult to load a web page on low speed internet.

[6]With less resources for downloads, it becomes difficult to create a web page having interactive UI/UX.

Figure 7: Data of people interested in contributing to others project.

Figure 8: Data for finding desired projects on Github.