Ex No: 1	**PROBLEM ANALYSIS AND PROJECT PLANNING**
Date: 12/07/2021	

AIM:

The concept of this project is to provide a low-cost E-Learning Platform to access free online courses and hands-on practices for the students and working professionals. Also, provide online tutor support while studying the courses online.

PROBLEM STATEMENT:

The world is rapidly moving towards the technical side, but unfortunately, the pandemic situation made the students life virtual. On the other hand, working professionals lost their jobs due to violate market situations. In some cases, students couldn't continue their studies and were forced to do odd jobs to support their families to meet basic needs. The education life of the affected students is in real danger.

One of the most vulnerable impacts that society faces in this condition is unpredictable. As per the data captured from The Hindu newspaper (Aug 2020), Over 24 million students left their studies from the schools and moved to a full-time job to rebuild their family situation. And this leads to being the worst fall in the literacy rate in India. And it would affect the other developing countries in the world.

Developing this E-Learning platform required a moderate level of the skilled web development team of 6 members to host publicly on the web. Because it requires both front-end and back-end development work to be done. And it will make a better look at a fully functional website, even though it is a dynamic website, which is updated daily by every teaching instructors.

BUSINESS CASE:

TITLE/ROLE:

E-Learning System to provide online teaching for the students free of cost.

THE PROJECT:

- E-Learning platform to provide free education to the students.
- Level of Implementation of this E-Learning platform has the three-layer architecture to facilitate sharing, learning modules, reusing them, and interoperability among different learning content efficiency.

- Due to covid crises in the world, a large group of students dropped our from the schools to get directly jumped into one-day jobs to support the financial situation of their families;
- If this condition goes uncontrollably, the literacy rate in India and other developing countries in the world.
- Now the only possible way to bring back students to their regular life.
- Developing an online platform will surely be a pathway to solve the problem.

HISTORY:

Covid-19 makes us feed dissatisfied with every work that we were performing in our day-to-day life. One of the most sensitive things was, covid-19 has made a tremendous impact on students' life by changing offline environment to online environment, Sudden crash in economic conditions made students lose interest in their studies and forced them to do one day jobs to year, if we want to bring back students to natural life usually takes at least 4 to 5 years to get all the things in normal condition These are some Bad history of the society, which is the key to activate this E-Learning system;

LIMITATION:

Building up this E-Learning platform faces several limitations:

1. Financially, it would require around 1,50,000 rupees to launch and receive users publicly on the web.
2. This e-learning platform required skilled, friendly teachers to post their lecture videos.
3. Some of the funds need to give online ads, television ads, social media ads, and other advertisements need to promote the platform throughout the world especially, in India.

Eventually, it would require qualified teachers to teach the students who are enrolled globally. That would be most challenging part of the whole project.

APPROACH:

- A flexible user experience is needed. If the user accesses the website, they will understand every single button, link and image to know about the video lecture on the website.
- Full-stack web developers need to work on the front-end and back-end parts of the website.
- Domain, hosting provider, and business emails are needed to build the user's trust and satisfaction.
- The website administration team needs to manage the client and admin panel of the website. Since it has a three-layer architecture, it won't be down anytime

- Promotions to get a large number of users in this e-learning platform.

BENEFITS:

Launching this E-Learning platform successfully on the web will give a lot of benefits to the learning students and the teaching instructors.

There are some ways where the students will benefit.

- The project has a three-layer architecture to facilitate sharing learning modules, reusing them, and interoperability among different learning content efficiently.
- 24/7 free coaching videos are available to focus the students constantly on their studies.
- A two-way chat application was available inside the website to clear their doubts through the instructor privately or the students.
- It would help to improve the Literacy rate in India in one year.

Some ways where the instructors will benefit:

- The Instructors who joined this E-Learning system will get paid once they've posted the entire Modules in a particular course.
- They'll get paid for every better course material/content.

How does the learning platform benefit?

- This platform had a specific page where an extensive level of projects developed opt for sale.
- This learning platform will get a specific income from the project page where the other people and professionals purchasing software and materials from the page.

SECTION 1. Project Description:

This project is simply an E-Learning platform that will work as a dynamic website. This platform powered by cloud computing would allow independent Learning Management System (LMS) embedded in various E-Learning standards to share their learning objects modules and content. It will work with a three-layer architecture to facilitate sharing, learning modules, reusing them, and interoperability among different learning content efficiently. The middle layer of the infrastructure contains an indexing module and a metadata transformation module to encourage the exchange of metadata among acknowledged e-learning standards. This website allows learners to use available leaning objects without requiring them to affiliated with any other Learning Management System (LMS).

SECTION 2. Problem Constraints:

- **What is the Purpose and Need for the work?**

The purpose and the need for the work is to provide education for free of cost and some courses at low cost.

- **What questions need to answer?**

If this project would launch by acquiring all the facilities, would it be possible to pay the instructors' salary constantly? How to encourage students to get into E-Learning if they are more interested in face-to-face learning?

How to make this new tool emerging and superior to the other similar e-learning platforms?

- **What are the key issues considered?**

Some significant issues like how the instructors will get paid constantly when this website will give courses free of cost? This case would be quite a complicated situation when going to work on this website.

Strong internet access? Is it possible to provide offline access with limited content?

- **What are the Goals and Objectives of the work?**

Overall goals and objectives were to provide free and low-cost education to the students who suffered from financial conditions due to covid-19.

- **Who is the audience?**

The audiences are the students and working professionals.

- **What types of useable information and tools are available and practical?**

The first usable information is study material which the students will get from the time they clicked the enrol option.

SECTION 3. Schedule, Resource, and Budget Constraints

- **What are the Existing Resources? Are they internal or external?**

Existing resources are internal resources like Domains and Hostings to develop and launch the website publicly on the web.

- **What is the Feasible Budget?**

At least 1,50,000 INR is wanted for the completion of work including, Domain, Hosting, and social media promotions.

- **What are the time constraints that may dictate the delivery of work items?**

The total completion with users would require a minimum of three to five months.

- **What is the availability and quality of existing data?**

Not even a single data is now available to start the project.

RESULT:

It would be complicated to provide education online for the students free of cost. Therefore, the E-learning project is in the initial conceptual phase. Also, I am working on making further possibilities to provide education to students free of payment.