

DESIGN PROJECT BY TECHNOLOGY MADE SIMPLE FOR STUDENTS



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Overview

- ▣ Introduction
- ▣ Project Goal
- ▣ Choosing a topic
- ▣ Literature review
- ▣ Working on project
- ▣ Documentation
- ▣ Hands-on learning environment
- ▣ Conclusion and Future work

Introduction

- ▣ Why do students do a project?
- ▣ Develop a Professional understanding and critical awareness of a related area
- ▣ Plan and execute skills as collaboration, communication, critical thinking, and the use of technology, which will serve them well in the workplace and life
- ▣ Significantly present existing approaches, identify their own approach in the wider area, and evaluate their contribution by writing a comprehensive, self-contained report

Cont..

- ▣ A dynamic approach were the students explore real-world problems and challenges, simultaneously developing cross-curriculum skills while working in small collaborative groups
- ▣ In the process of completing their projects, students also hone their organizational and research skills, develop better communication with their professional group. The positive effect of their work which sustain and fulfil the mission
- ▣ To achieve magnificent project proceed with

GROUPS

Cont...

- ▣ Give thoughtful feedback

- ▣ Respect opinions

- ▣ On task all the time

- ▣ Use soft voices

- ▣ Participate actively

- ▣ Stay with your group

Project Goal

- ▣ **Who?** originator of the plan
- ▣ **What?** make a paradigm (concept , theory, idea) of plan
- ▣ **Where?** in organization or at home
- ▣ **When?** cycles of work days and rest days
- ▣ **Why?** to show specific, measurable, achievable, relevant and time-bound.
- ▣ **How?** measurable and the projects end-result is addressed through the action of the objective.

Choosing a Topic

- ▣ The topic chosen should be the best possible topic that interest and excite
- ▣ What would student like to find out about it?
- ▣ There are several resources available to assist in choosing the best topic
- ▣ The project should be original and focus on discovering something new or improving on something known
- ▣ When choosing possible topics, keep in mind that originality matters-to ensure that the project should be very specific

Cont...

- ▣ The more specific, the easier project will be to design, carry out and analyze
- ▣ Was there a segment that didn't go far enough?
Very particular to learn more about it?
- ▣ Choose the path which is most comfortable as well as, feel free to mix and match the different approaches

Integument Out an Idea

- ▣ May be student can start with a tentative idea for a project, but are not quite sure about it? if the idea is capable of being done/ or needs a bit of modification
- ▣ **Ask a "Closed-Ended" Question**
- ▣ Explore - invent to answer the question, and the end is the answer that the observation gives

Cont...

- ▣ Try to define the project as a question/problem rather than as a topic
- ▣ Let's say you're interested in client-server systems,

WHY?

- ▣ **W**hat interests you in this topic?
- ▣ **H**ow much you are interested in this topic?
- ▣ **Y**awning to be with this Topic ?

Cont...

- ▣ Do some background study in this area by reading a textbook, some papers, etc.
- ▣ While doing so, try to come up with some questions, e.g.
 - ❖ What is the purpose of client – server architecture?
 - ❖ How do servers manage unreliable clients?
 - ❖ How do multiple servers coordinate accesses?

Glance at Existing Projects

- ▣ There are lists of the topics of previous projects available E-library
- ▣ Finding some interesting articles in newspapers or the computer press(Journals)
- ▣ This can be taken as a milestone to step an idea what to do, e.g. by expanding or extending a previous topic
- ▣ After having a first idea you can follow the route for tentative ideas discussed earlier

Cont...

- ▣ At the beginning, the main problem starts with confusion
- ▣ It is a good idea to put some effort into making idea more concrete
- ▣ The clearer with idea, the easier it will be to write the project proposal
- ▣ Project learning is also an effective way to integrate technology into the curriculum. A typical project can easily accommodate computers and the Internet, as well as interactive whiteboards, global-positioning-system (GPS) devices, digital still cameras, video cameras, and associated editing equipment.

Literature review

- ▣ The aim of a literature review is to optimize content and have a good grasp of, the main published work concerning a particular topic or question in the field.
- ▣ Compare and contrast different authors' views on an issue
- ▣ Note down the areas in which authors are in disagreement, highlight ultimate study
- ▣ Explain how the study relates to the literature in general and conclude

Working on Project

- ▣ Aim of the project
- ▣ Objective that supports the aim
- ▣ The SMART method can be used to make them more Concrete

SMART

- ▣ SMART is an acronym standing for:
 - **S**pecific: be as specific as possible
 - **M**easurable: try to establish measurable indicators of progress
 - **A**ssignable: even though you're working on your own, formulate objective as if you assign them to someone else for completion
 - **R**ealistic: state what can realistically be achieved within the budgeted time (and resources)
 - **T**ime-related: set milestones for the objectives

Concrete on your project

▣ Observation

Gathering information from a primary source is way of gathering data something seen or experienced

▣ Hypothesis

A hypothesis is usually developed from experience, literature or theory, or combination of these.

A proposed explanation for a phenomenon, resemble generalized models that may employ classical or nonclassical logic.

A hypothesis is a tentative answer to a research question from the observation before the project is Implemented.

Cont...

▣ Experimentation

Easy experiments and project ideas that make learning fun ...

To demonstrate Galileo's falling objects experiment that states "What goes up, must come down". After this experiment you'll be able answer the question "Do larger objects fall faster than lighter ones under the same conditions?"

To determine the strength of several different process in a project - the end of your experiment, should have an understanding of what factors make project weak and which made stronger.

Cont...

- ▣ **Estimated Time**

An in-depth view of all the elements with the technically productive enterprises in a particular field or side-by-side element comparisons ...

- ▣ **Conclusion**

An opinion or decision that is formed after a period of thought or research emphasize or reinforce your main ideas. It should refer back the introduction, either with key words or parallel concepts and images.

Documentation

- ▣ A short explanation of the topic and where it fits into the technology
- ▣ Way to uncover new knowledge, and to report relationships among different aspects of studied information
- ▣ Acquiring new knowledge, or correcting and integrating previous knowledge with statement of method
- ▣ Might be very specific and strongly supported by evidence, a new question can be asked to provide further insight on the same topic.
- ▣ The scientific method includes other components required even when all the iterations are completed

Cont...

- ▣ It charts the conceptual space created within the data
- ▣ Work carried detailed information about long-term enactment
- ▣ To achieve the status despite being present on the sector
- ▣ **Impact to learn about the highest, lowest, deepest, largest, most powerful and more!**
- ▣ Descriptions, photos, articles, properties and uses for common concept.

illustration of references

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Sample Projects

- ▣ A Tool to find bugs in Computer Games
- ▣ Analysis and verification of stochastic hybrid systems
- ▣ Bioinformatics projects
- ▣ Bayesian models of word alignment for Machine Translation
- ▣ Enabling Multi-level parallelism in parallel MATLAB
- ▣ GeomLab and Mindstorms
- ▣ Helicopter Robots
- ▣ Identifying features in MRI Scan data

HANDS-ON LEARNING ENVIRONMENT

- ▣ Harvard reference system - A Quick Guide to Harvard Referencing and Harvard Referencing Examples
- ▣ computer projects for students
- ▣ student project proposal
- ▣ <https://cse.nd.edu/research/current-projects>
- ▣ <http://www.cs.umd.edu/projects/TimeWare/TimeWare-index.html>

Conclusion and Future work

- ▣ The description of work with concerned development
- ▣ Extending the process to work with different modes
- ▣ Develop a framework with future Impact - construct and evaluate according to the model
- ▣ Well defined suggestions for future implementations and studies reveal the need for providing additional/ different functionality

QUESTIONS PLEASE ?

THANK
YOU!