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Introduction

The thirst for learning, upgrading technical skills and applying the concepts in real life environment at a fast pace is what the industry demands from IT professionals today. However busy work schedules, far-flung locations, unavailability of convenient time-slots pose as major barriers when it comes to applying the concepts into realism. And hence the need to look out for alternative means of implementation in the form of laddered approach.

The above truly pose as constraints especially for our students too! With their busy schedules, it is indeed difficult for our students to keep up with the genuine and constant need for integrated application which can be seen live especially so in the field of IT education where technology can change on the spur of a moment. *Well, technology does come to our rescue at such times!!*

Keeping the above in mind and in tune with our constant endeavour to use Technology in our training model, we at Aptech have thought of revolutionizing the way our students learn and implement the concepts using tools themselves by providing a *live and synchronous eProject   learning environment!*

So what is this eProject?

eProject is a step-by-step learning environment that closely simulates the classroom and Lab based learning environment into actual implementation. It is a project implementation at your fingertips!! An electronic, live juncture on the machine that allows you to

- o   Practice step by step i.e. laddered approach.
- o   Build a larger more robust application.
- o   Usage of certain utilities in applications designed by user.
- o   Single program to unified code leading to a complete application.
- o   Learn implementation of concepts in a phased manner.
- o   Enhance skills and add value.
- o   Work on real life projects.
- o   Give a real life scenario and help to create applications more complicated and useful.
- o   Mentoring through email support.

The students at the centre are expected to complete this eProject and send complete project along with the documentation to eProjects Team

Looking forward to a positive response from your end!!

Objectives of the project

The Objective of this program is to give a sample project to work on real life projects. These applications help you build a larger more robust application.

The objective is not to teach you JSON/JavaScript/Dreamweaver/HTML5 but to provide you with a real life scenario and help you create basic applications using the tools.

You can revise the chapters before you start with the project.

This project is meant for students who have completed the module of **HTML5**. These programs should be done in the Lab sessions with assistance of the faculty if required.

It is very essential that a student has a clear understanding of the subject. Students should go through the project and solve the assignments as per requirements given.

Kindly get back to eProjects Team in case of any doubts regarding the application or its objectives.

Problem Statement

Alpine Ascents is a leader in the Mountaineering and Climbing industry and has been instrumental in setting guiding standards in the international climbing community. Our mission and goals are simple: by using the best climbing talent in the country, we offer the opportunity for climbers at all levels to achieve their personal aspirations through quality, challenging, safe and fun expeditions. Unparalleled mountain adventures are what we do.

Mountaineering, also called mountain climbing, the sport of attaining, or attempting to attain, high points in mountainous regions, mainly for the pleasure of the climb. Although the term is often loosely applied to walking up low mountains that offer only moderate difficulties, it is more properly restricted to climbing in localities where the terrain and weather conditions present such hazards that, for safety, a certain amount of previous experience will be found necessary. For the untrained, mountaineering is a dangerous pastime.

Unlike most sports, mountaineering lacks widely-applied formal rules, regulations, and governance; mountaineers adhere to a large variety of techniques and philosophies when climbing mountains.

You are required to develop a website which will give detailed information about mountaineering.

The website which they demand is supposed to provide user friendly environment and navigation. The important menu must be stated in the top section of the webpage. Also a decent look out and color combination is expected.

You are supposed to create a Single-Page-Application and responsive Website for them with the below mentioned requirement specifications.

The website is to be developed for the Windows Platform using HTML5, JSON, Angular JS, JavaScript and Geolocation. The site should work well in all leading browsers including Chrome, IE, Firefox etc.

Functional Requirement Specification:

The portal will be designed as a Single-Page-Application and responsive Website with a set of pages and menus that represent choice of activities to be performed. The pages, menus, and other visual elements must be designed in a visually appealing manner with attractive fonts, colors, and animations.

All of these should also be laid out in a responsive manner

The Web site is to be created based on the following requirements.

1) There should be detailed information about mountaineering
2) The site should also include the details mentioned below in relation to the mountaineering
   - History
   - Types/Styles
   - Techniques
   - Sheltering
   - Hazards
3) Various records related to it should also be made available.
4) The site should also provide the details of groups/organizations/clubs with their location should be displayed using GeoLocation API (eg. GoogleMaps) that arrange mountaineering to various locations in different areas across the globe Users should also be able to see various success stories of organized camps.
5) There should be a gallery section where informative /related videos and pictures
6) There should be a separate section for the material on latest developments in the field.
7) Also there should be general guidelines.
8) Also each link must be properly hyperlinked; images must be used wherever necessary.

Over and above this, the portal should implement the following functionalities:

- Display a continuous scrolling ticker at the bottom of the page with current date, time, and location (hint: Use geolocation features of HTML5).
- Display a visitor count at the top right corner of the page beside a logo image.
- The menu options should change color on hover and also after clicking.
- Fade in and fade out options can be used for the menus.

Hardware/ Software Requirements

Hardware

- Intel Core i3/i5 Processor or higher
- 8 GB RAM or above
- Color SVGA
- 500 GB Hard Disk space
- Mouse
- Keyboard

Software

Technologies to be used:

- Frontend: HTML5, CSS, Bootstrap, JavaScript, jQuery, AngularJS, XML
- Data Store: JSON files or TXT files

Other Requirements:

- Operating Portal: Windows
- Browsers: Edge, Chrome, Mozilla Firefox, Safari