Project Guide

Web Site Designing Using HTML5

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Aptech™
COMPUTER EDUCATION
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Dear Learner,

We congratulate you on your decision to pursue an Aptech course.

Aptech Ltd. designs its courses using a sound instructional design model – from conceptualization to execution-incorporating the following key aspects: –

- Scanning the user system and needs assessment

Needs assessment is carried out to find the educational and training needs of the learner.

Technology trends are regularly scanned and tracked by core teams at Aptech Ltd. TAG* analyzes these on a monthly basis to understand the emerging technology training needs for the Industry.

An annual Industry Recruitment Profile Survey# is conducted during August - October to understand the technologies that Industries would be adapting in the next 2 to 3 years. An analysis of these trends & recruitment needs is then carried out to understand the skill requirements for different roles & career opportunities.

The skill requirements are then mapped with the learner profile (user system) to derive the Learning objectives for the different roles.

- Needs analysis and design of curriculum

The Learning objectives are then analyzed and translated into learning tasks. Each learning task or activity is analyzed in terms of knowledge, skills and attitudes that are required to perform that task. Teachers and domain experts do this jointly. These are then grouped in clusters to form the subjects to be covered by the curriculum.

In addition, the society, the teachers, and the industry expect certain knowledge and skills that are related to abilities such as learning-to-learn, thinking, adaptability, problem solving, positive attitude etc. These competencies would cover both cognitive and affective domains.

A precedence diagram for the subjects is drawn, where the prerequisites for each subject are graphically illustrated. The number of levels in this diagram is determined by the duration of the course in terms of number of semesters etc. Using the precedence diagram and the time duration for each subject, the curriculum is organized.

- Design & development of instructional materials

The content outlines are developed by including additional topics that are required for the completion of the domain and for the logical development of the competencies identified. Evaluation strategy and scheme is developed for the subject. The topics are arranged/organized in a meaningful sequence.

The detailed instructional material – Training aids, Learner material, reference material, project guidelines, etc. are then developed. Rigorous quality checks are conducted at every stage.

- Strategies for delivery of instruction

  Careful consideration is given for the integral development of abilities like thinking, problem solving, learning-to-learn etc. by selecting appropriate instructional strategies (training methodology), instructional activities and instructional materials.

  The area of IT is fast changing and nebulous. Hence, considerable flexibility is provided in the instructional process by specially including creative activities with group interaction between the students and the trainer. The positive aspects of Web based learning – acquiring information, organizing information, and acting on the basis of insufficient information are some of the aspects which are incorporated in the instructional process.

- Assessment of learning

  The learning is assessed through different modes – tests, assignments & projects. The assessment system is designed to evaluate the level of knowledge & skills as defined by the learning objectives.

- Evaluation of instructional process and instructional materials

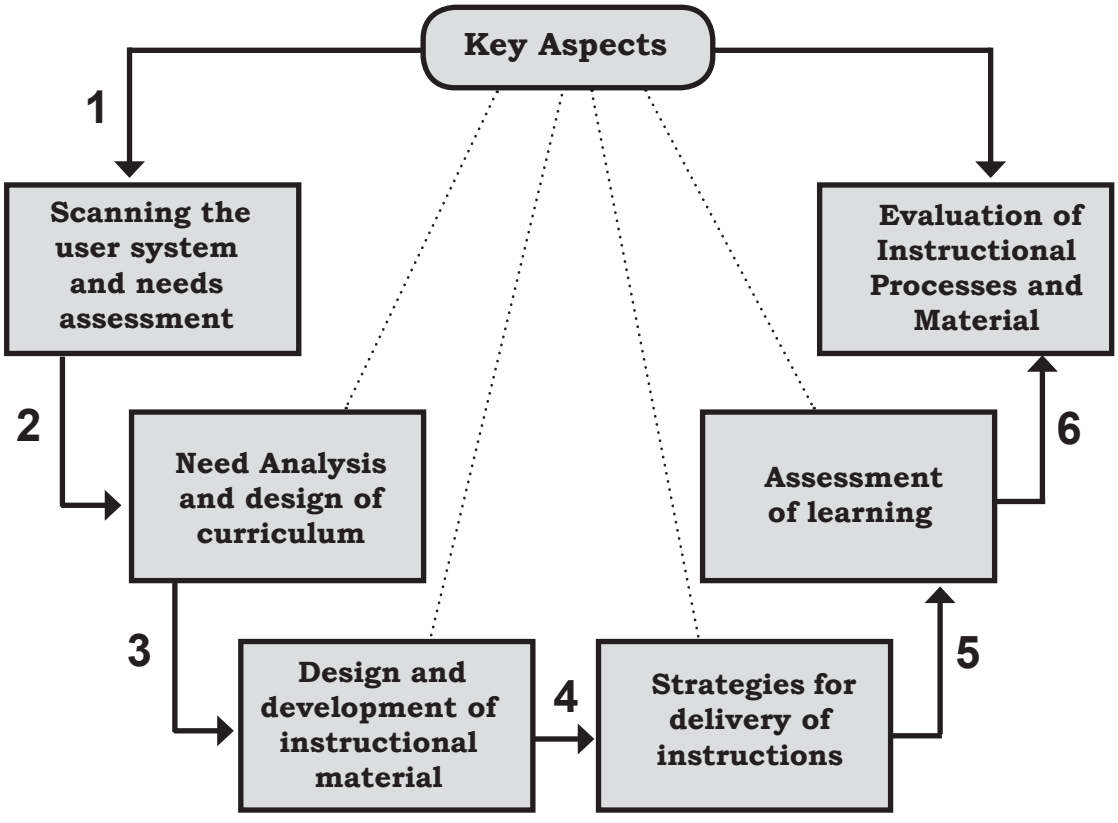
  The instructional process is backed by an elaborate monitoring system to evaluate - on-time delivery, understanding of a subject module, ability of the instructor to impart learning. As an integral part of this process, we request you to kindly send us your feedback in the reply pre-paid form appended at the end of each module.

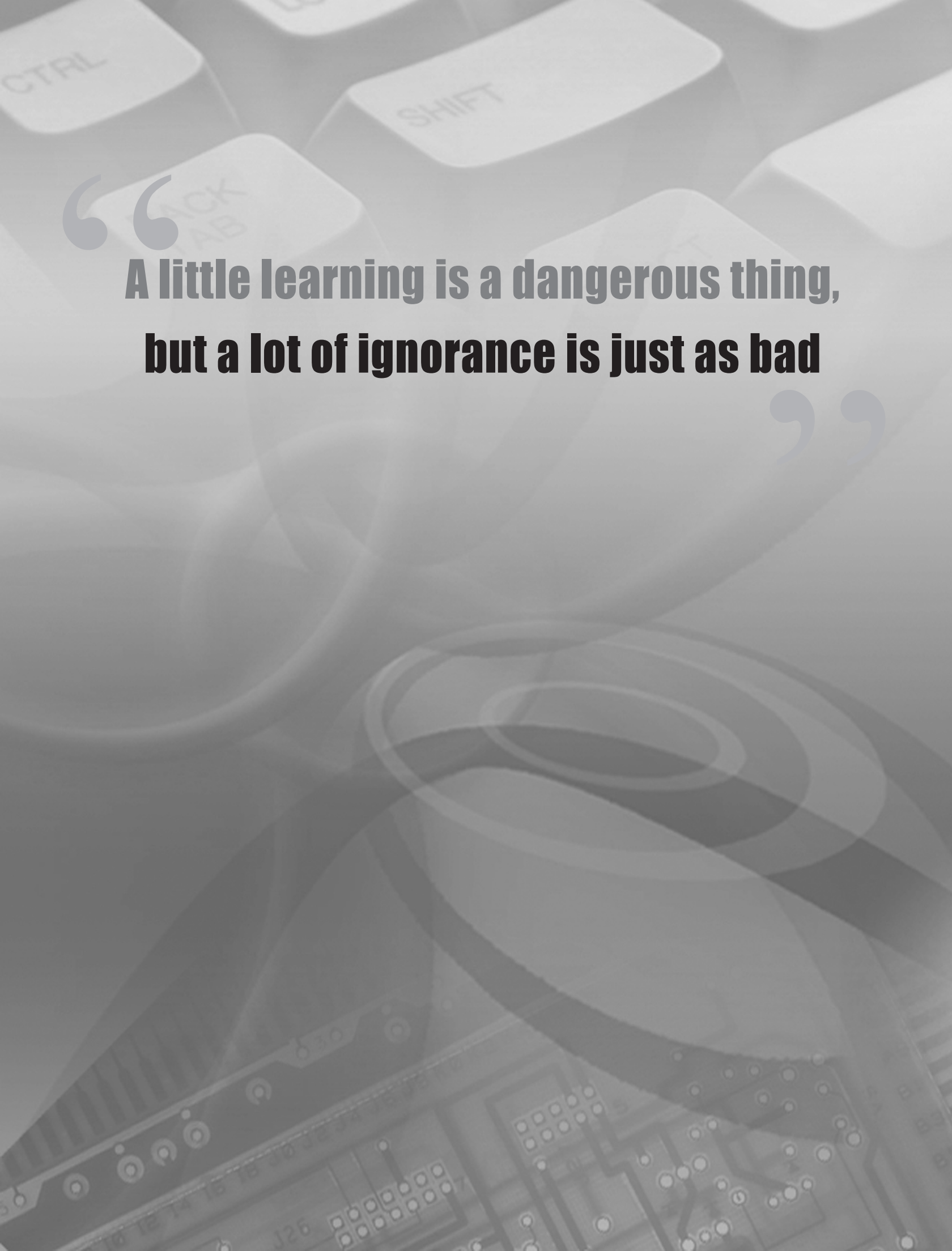
*TAG – Technology & Academics Group comprises members from Aptech Ltd., professors from reputed Academic Institutions, Senior Managers from industry, technical gurus from software majors & representatives from regulatory organizations/forums.

Technology heads of Aptech Ltd. meet on a monthly basis to share and evaluate the technology trends. The group interfaces with the representatives of the TAG thrice a year to review and validate the technology and academic directions and endeavors of Aptech Ltd.

#Industry Recruitment Profile Survey - The Industry Recruitment Profile Survey was conducted across 1581 companies in August/September 2000, representing the Software, Manufacturing, Process Industry, Insurance, Finance & Service Sectors.

Aptech New Products Design Model





“A little learning is a dangerous thing,
but a lot of ignorance is just as bad”

Preface

Today, the influence of IT spans over a wide area of commerce and industry. The process started with the conversion of support systems such as payroll, inventory, accounts management, and HR management in organizations. This process took the manufacturing units and back processes under its umbrella and has continued to influence the service sector also. Huge databases and analytical models of processing characterize these recent extensions into services. Computerized Web portals for businesses are one such area.

The Project in HTML5 is about developing an advertisement Web portal, GoGlobal.com, for an advertisement agency. The narration of the case study is given in section 1.2 of this project guide.

The best way to learn something is to apply its principles and test it. Similarly, the best way to evaluate the tool knowledge of the students is to apply it through project work. The degree of success of the project depends on the strength of its Guide. This Project Guide has been prepared following the best practices in the Industry and helps you to have the experience of going through a LIVE project. It teaches you the essentials of successful development of IT projects.

The Project Guide will help you to:

- Analyze a project
- Design the specifications of the project
- Develop the solution
- Maintain disciplined documentation for the work done

This Project Guide reiterates the commitment of Aptech in keeping up its tradition of providing innovative, career oriented professional education. This ensures that modules are based on the Project Based Learning concept.

Religiously following the given systematic approaches in this book would prepare you to get the real life experience of handling projects. This is because the practices listed here have been extracted from the current industry norms. Thus, such an exercise would prepare you for joining the Software Development Industry.

The knowledge and information in this book is the result of a concerted effort of the Design Team, which is continuously striving to bring you the best and the latest in Information Technology. The process of Design has been a part of the ISO 9001 certification for Aptech-IT Division, Education Support Services. As a part of Aptech's quality drive, this team does extensive research and curriculum enrichment to keep it in line with industry trends.

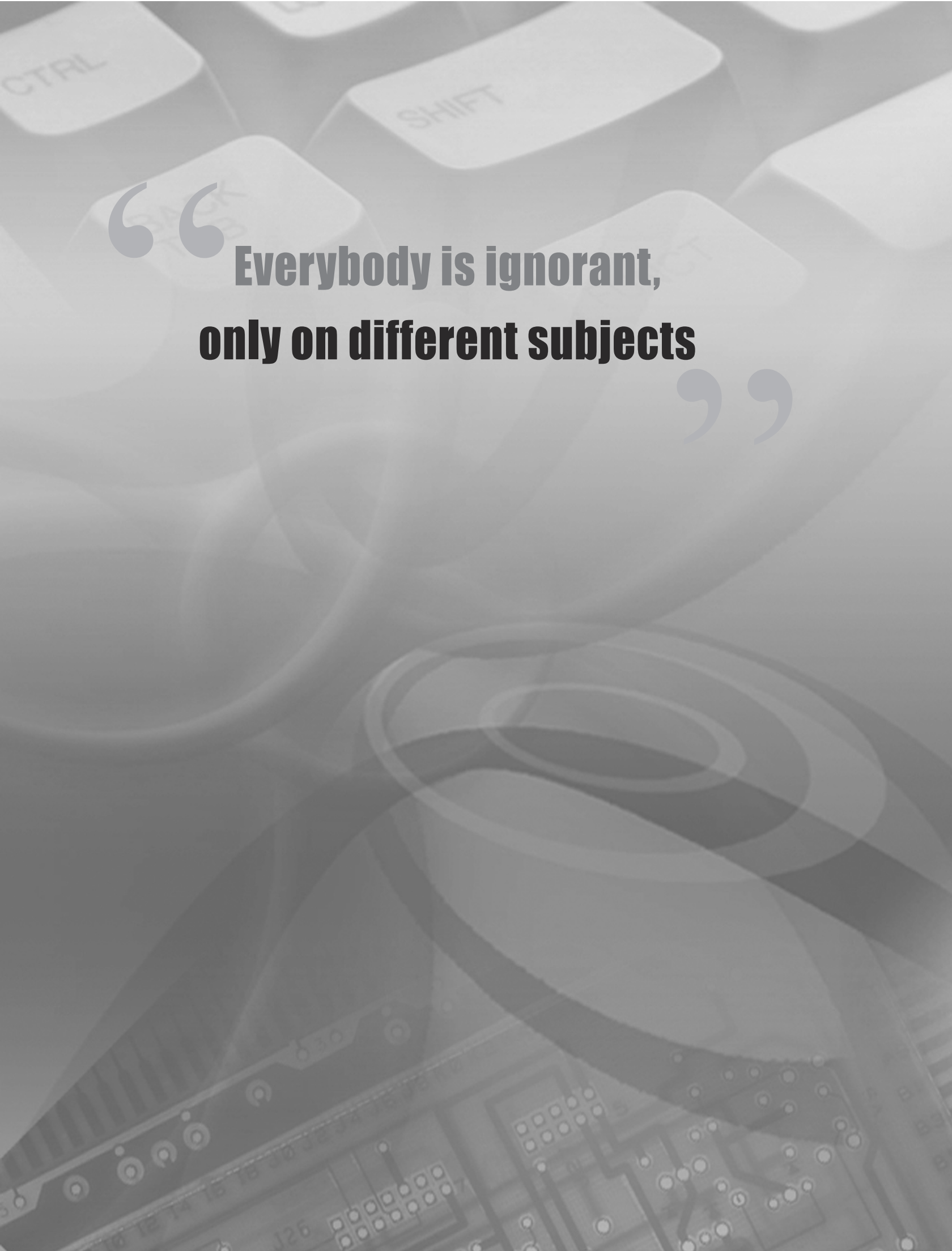
We will be glad to receive your suggestions. Please send us your feedback, addressed to the Design Head at Aptech Corporate Office, Mumbai.

Wishing you the very best.

Design Team


Learning is a treasure that will
follow its owner everywhere

Contents


“Everybody is ignorant,
only on different subjects”

Web Site Designing Using HTML5

1.1 How to Use this Project Guide

In this project based learning approach an entire project has to be developed throughout the lab sessions. The modules are based on a case study. You will code the solution for that case study throughout the labs of all the modules. Therefore, it is important to complete thoroughly and successfully the labs of all the modules. To do this, it is necessary to refer to the Project Guide as and when required.

The following guidelines will help to understand how to use Project Guide throughout your course:

1. Read the Case Study and understand the business scenario.

2. Solve the lab questions so that different components of the application are ready.

3. Document the design of the corresponding Process, Component, Interface, and Function as soon as you complete your lab exercise.

4. Check whether your code follows the common standards.

5. Identify the areas where common coding standards can be implemented and design the common standards for coding.

6. Integrate the entire project that you have developed throughout all lab sessions.

1.2 Case Study

Go Global is a public relations, international advertising, and marketing agency headquartered at New York since 1948. This firm operates in more than 120 countries across the world. The creative team of Go Global lies behind the promotion of the most successful and renowned brands such as McDonald's, Heinz, Vodafone, Cadbury, and Henkel. Over the years, the company has offered its consumers powerful brand experiences using creative ads for its clients. The Go Global network offers its services to numerous Fortune Global 500 companies across the world. Go Global advertising continues to remain world's number one advertising agency.

Also, since its inception the company has skillfully delivered successful results to several other high-profile clienteles such as Domino's Pizza, Cathay Pacific, and American Tourister. Go Global is well known for its one-of-a-kind speciality divisions such as Design Mania, eContract, and Global Consulting providing complete advertising solutions.

With growth in so many countries across the world due to good services, the number of clientele is increasing day by day. Also, the need to better promote its clients with rising competition has become a concern for the management. So far, the company has been using hoardings, television advertisements, broadcasting, and banners to promote and advertise its clients.

However, with the clients fame also reaching a global scale, it has become a necessity to promote the clients in such a way that a user can know about them anytime and from anywhere. Also, considering the fact that creating television ads and banners is very time consuming and expensive for several clients that are mid-size companies, a cheaper solution needs to be thought of.

Proposed Solution

The solution to the problem is to create an advertisement Web portal to display the clients' advertisement.

The management of Go Global has decided to implement an advertisement portal which will help to promote its clients globally and allow customers to view the details of the various brands at a click of the mouse from anywhere in the world. The portal will not allow client logins or any monetary transactions, but it will enable the clients to advertise themselves.

The client's ad will be displayed on the portal after paying the required advertisement amount to Go Global.

When a user visits the Web page of Go Global, he/she will be able to view the ads of all the clients of Go Global. Upon clicking the ad, the user will be directed to the Web page of the respective company. The details of the company shall be displayed in another Web page designed specifically for the company to display its products.

Project Specifications

GoGlobal.com is a Web portal that allows global advertisement of important clients of Go Global.

GoGlobal.com manages the creation, updation, and removal of customer's advertisements and links based on the payment and duration decided in the contract with the client. It displays the information of clients based on specified criteria, that is, as a hyperlink, as an image link, scrolling text, static text, or image.

When a user visits the Web page of Go Global, he/she can view the ads of the various clients of Go Global and click the links to further visit the company's own Web page. The site also displays some additional objects such as date/time, mini calculator, location finder, library, embedded video, local and session storage of data, canvas to display creative designs, links to social networking sites such as facebook, twitter, and so on.

The Web site is to be developed for the Windows platform using HTML5, JavaScript, and GeoLocation API. The site will be tested on all latest and popular browsers such as IE, Opera, and Chrome. The hardware requirements include Pentium 4 or higher processor, 1 GB or higher RAM, and an HTML5 compatible browser to view the Web site.

1.3 Team Building

The commission and implementation of any computerized system involves the work of a team of people. A Project Leader leads this team. A Project Leader essentially decides which tasks are to be performed by each team member and how much time should be allotted to each Project Development Phase.

A team typically consists of:

- **Analyst**

  The Analyst studies the requirements of the system and defines the problem. The Analyst identifies the needs of the system and determines the inputs, outputs, and processes involved in transforming those inputs into outputs.

- **Designer**

  The Designer creates a blueprint of the system in terms of the database structure, screens, forms and reports.

- **Developer/Programmer**

  The Developer builds the user interface according to the specifications prepared by the Designer. Next, the Developer builds a prototype of the system.

  After receiving client approval on the prototype, the Developer adds the necessary code to make the prototype a full-fledged system.

- **Tester**

  The Tester tests the working of an application by first testing each module for its functionality. Test data is used to check if the module is able to process it without causing any errors. Test data may be live data extracted from existing records in the system or dummy data. The Tester then also verifies the integrated application's functionality with test data.

- **Implementation Engineer**

  The implementation engineer ports the completed application to the Client's computers. The implementation engineer ensures that the installation process has been carried out accurately, and hands over the system to the Client.

- **Maintenance Engineer**

  The Maintenance engineer is responsible for taking care of maintaining the system that has been built.

Maintenance includes extending troubleshooting support, and performing software upgrades in case of changes in the external system.

Though each role is huge in itself, the same team member may perform more than one role in a team. For example, one person could assume the role of both Analyst and Designer.

The project team interacts with the client (customer for whom the project is being developed). For your project, the teacher takes on the role of the client. Hence, all the interactions that the project team performs with the client, you will perform with the Teacher.

For the ***GoGlobal.com*** site, the roles of the Implementation Engineer and Maintenance Engineer are beyond the scope of this project. Since each one of you has to learn the various roles, the members of the Project Group will perform all the roles of Analyst, Designer, Programmer, and Tester together. Each of you will not be assigned one role and be limited to performing that role only.

1.4 Architecture of the Application

The Web site will have a client-server architecture.

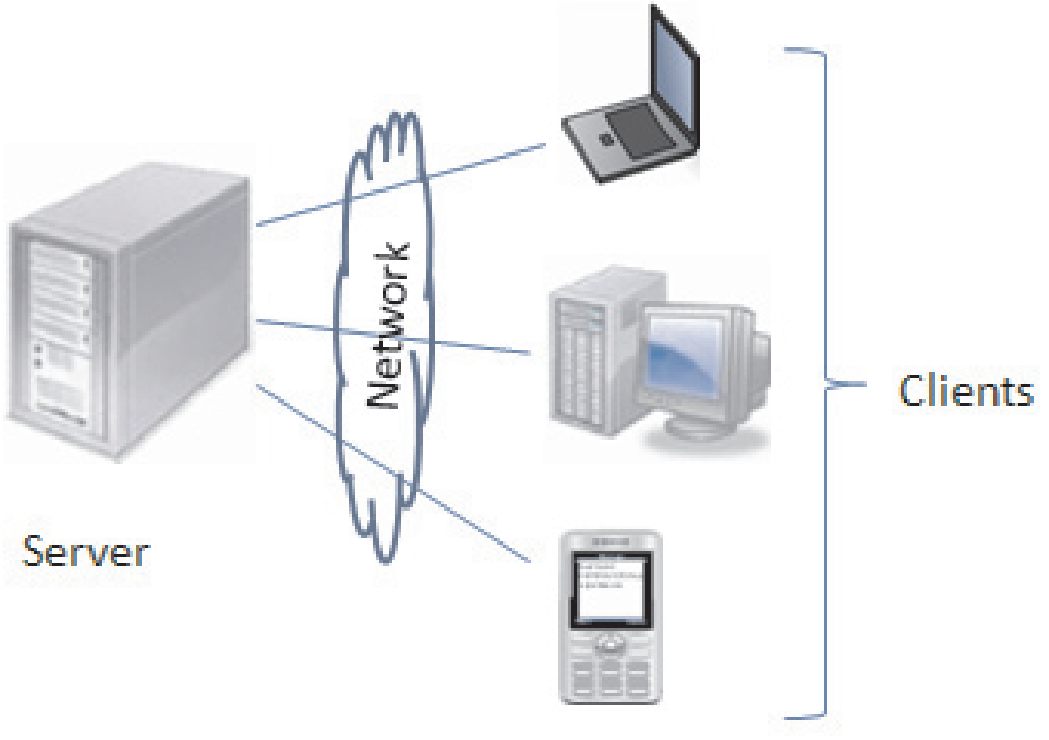


Figure 1.1: Client-Server Architecture

Data Flow Diagram:

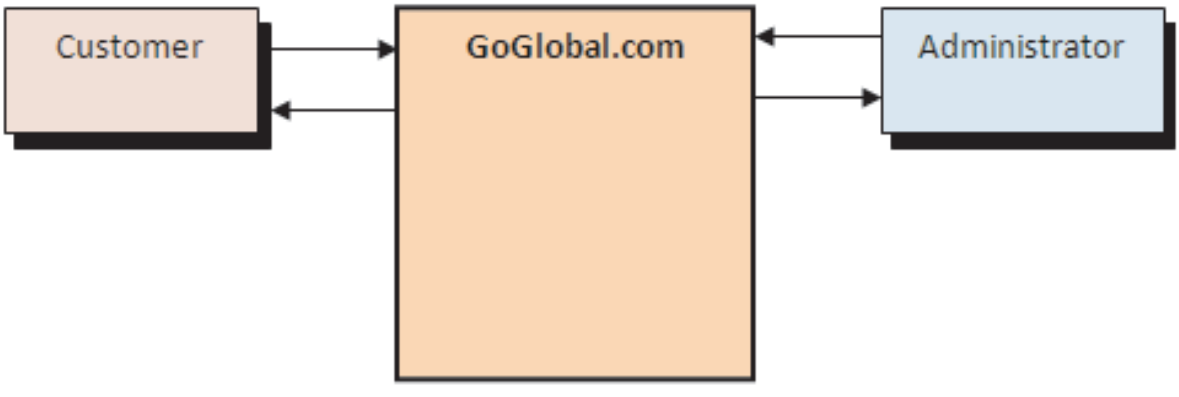


Figure 1.2: LEVEL 0 DFD

Site Map

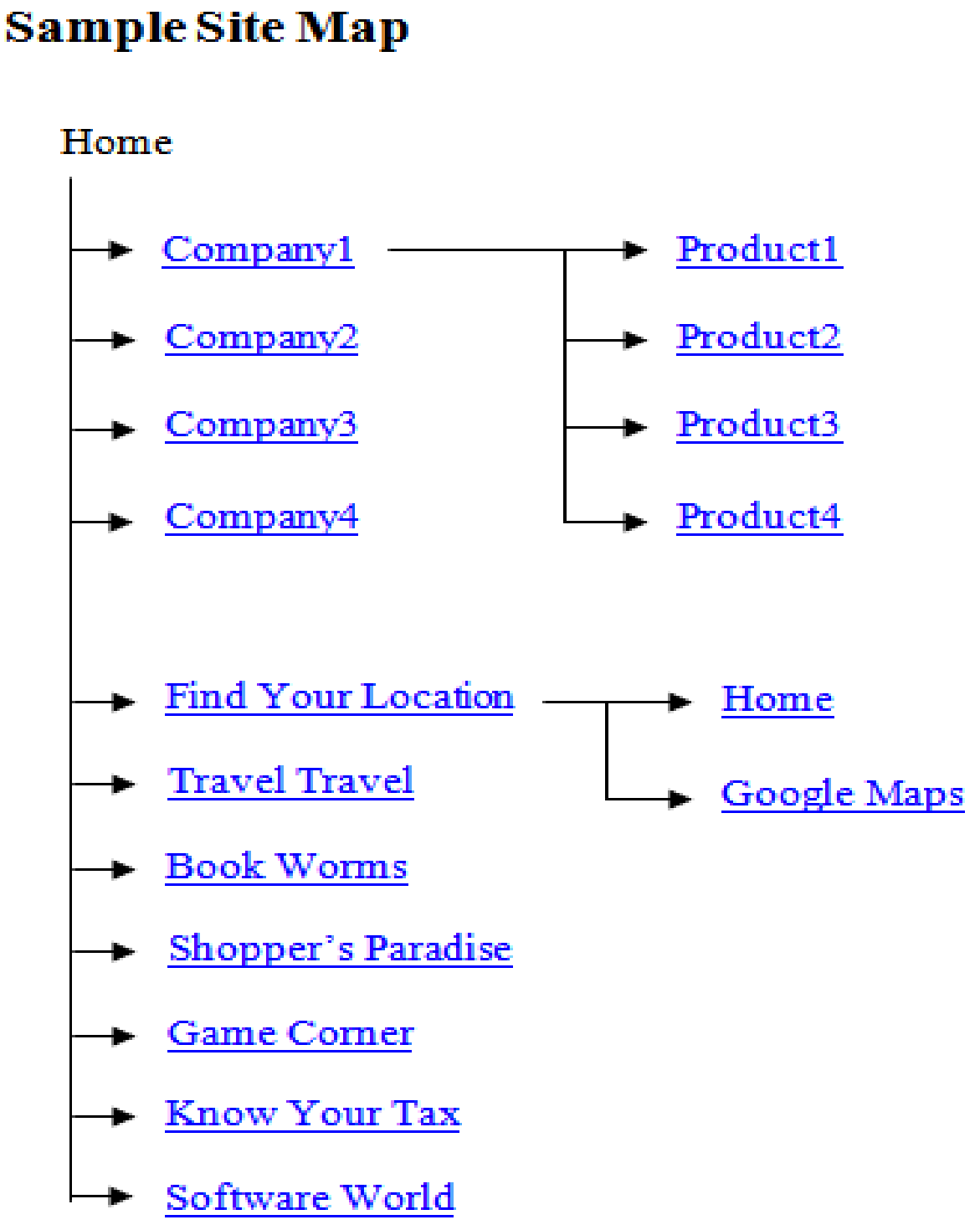


Figure 1.3: Site Map

Test Cases

num1	num2
blank	blank
40	35

```
<script>
  function calculate() {
       var num1 = document.getElementsByName('textbox1')[0].value;
       var num2 = document.getElementsByName('textbox2')[0].value;
       if(num1.length <1  || num2.length < 1){
           alert("Please provide two numbers");
       }
       else{
           var action = document.getElementsByName("Calc");
           var num3;
           if(action[0].checked == true) {
               num3 = Number(num1) + Number(num2);
           }
           else if(action[1].checked == true){
               num3 = Number(num1) - Number(num2);
           }
           else if(action[2].checked == true){
               num3 = Number(num1) * Number(num2);
           }
           else if(action[3].checked == true){
               num3 = Number(num1) / Number(num2);
           }
           else{
               num3 = 0;
           }
           document.getElementsByName('textbox3')[0].value = num3;
       }
    }
</script>
```

1.5 Phases in a Project's Life Cycle

Every software development activity can be distinguished into clear phases. Each phase has precise starting and ending points, with clearly identifiable deliverables to the next phase. Each phase may have certain documents, which help to keep track of the various activities, processes, procedures, inputs, and outputs associated with that phase of the project.

The project development life cycle consist of the following phases:

- **Phase 1: Definition of the Problem**
- **Phase 2: Requirement analysis**
- **Phase 3: Design**
- **Phase 4: Development**
- **Phase 5: Evaluation/Testing**
- **Phase 6: Implementation**
- **Phase 7: Maintenance**

Each of these phases is discussed.

1.5.1 Definition of the Problem

Correct and accurate deduction of the client requirements and expectations from the system is the key to the development of the system. This phase assumes more significance as it has cost implications attached and these will affect the whole project. When the need is wrongly identified, the whole system will be developed on a wrong premise.

Therefore, this phase involves defining the problem and fixing up its boundaries. The needs and problems faced by the client are recorded in this phase. At the end of this phase, the team is clear with the project objectives and their work purview. Inputs to this phase are always unstructured. These inputs are gathered from interactions with the client.

The activities involved in this phase are:

- Meeting the Client
- Understanding the Client's needs

- Identifying the probable solution
- Defining the scope of the project

The ***Problem definition*** in the GoGlobal.com application would be:

This Problem Definition has been identified and recorded in the ***Problem Definition Document*** in '**SWD/ Form No.1**'.

Once a client's problem has been identified, the next step would be to generate the **Customer Requirement Specification** as a part of the Requirement Analysis phase.

Now, carefully study and understand the Case Study specifications in the ***GoGlobal.com*** application.

1.5.2 Requirement Analysis Phase

During this phase, the Analyst identifies the processes of the current system, and the inputs and outputs for those processes. The processes, inputs and outputs are recorded in a document called the Customer Requirement Specification. Actually, the **Customer Requirement Specification** is not a single document; it is a docket of many documents. It consists of:

- **List of inputs to the system**

  These refer to the inputs required for the system to work on and thus produce the desired output.

  For example, in the ***GoGlobal.com*** case, some inputs would be expected type of ad, type of client, and so on.

- **List of outputs expected from the system**

  These refer to the various reports that the system would produce.

  For example, in the ***GoGlobal.com*** case, some of the outputs would include a search result for client details, product details, and so on.

- **Overview of processes involved in the system**

  Once the inputs and outputs are listed down, the list of processes that convert the inputs into desired outputs is prepared.

For example, in the ***GoGlobal.com*** case, this list would include the following:

- Displaying advertisements
- Add, modify, and delete advertisements
- View location on map
- Browse company ad pages as well as social networking sites

➢ **Hardware and software required for implementing the project**

Here, the team gives a list of software and hardware required to implement the system. The Client uses this information to get an approximation of the required setup and training requirements.

For example, in the ***GoGlobal.com*** case, the software required could be HTML5 editor and IE/ Chrome/Opera browser.

For ***GoGlobal.com***, you must record the same in the document '**SWD/ Form No.2A**'**.**

➢ **Customer's acceptance criteria for the project**

The software product developed must meet the Client's needs and expectations as specified in the problem definition.

Apart from this, it should also fulfill the performance, speed and reliability parameters specified by the Client.

For example, in the ***GoGlobal.com*** case, the acceptance criteria could be the following:

- Advertise the product
- View product details
- Contact the advertising company
- View location on map
- Browse company Web site as well as social networking sites

For ***GoGlobal.com***, you must record the **Customer Acceptance Criteria** in the document '**SWD/ Form No.2B**'.

This Customer Requirement Specification Document needs client approval, which is termed as ***sign-off***.

Once the Client has given a sign off on the ***Customer Requirement Specification*** Document, the ***Project Leader*** creates a '**Project Plan**'. A Project Plan is a brief of all the phases, deliverables, milestones, implementation issues related to a project.

For ***GoGlobal.com***, you must create a '**Project Plan**' and submit to the teacher for review. You can fill your **Project Plan** details in the document '**SWD/ Form No. 3**' given in the ***Documentation Section*** of this Project Guide. Your Teacher will prepare the '**Project Plan**' for ***GoGlobal.com*** and demonstrate it to you.

1.5.3 Design Phase

Design Phase involves the preparation of the blueprint of the proposed system, which involves the following:

1. Designing the GUI Standards
2. Designing the Interface for the application
3. Designing the Database
4. Designing the Process Modules
5. Designing the Coding Standards
6. Building the Prototype
7. Assigning and Monitoring Tasks

➢ **Designing GUI Standards**

When an application is designed, it must follow standards with respect to flow, appearance and look of an application. Standards are used to bring about consistency throughout the application.

GUI Standards are related to the appearance of an application. It is mandatory for the Project Leader and team members to visualize the entire look of the application before it is actually developed. This visualization has to be defined in terms of GUI Standards so that each screen being developed maintains consistency in look and flow. The color, font style, size of titles and labels, appearance of header and footer, theme, position and size of controls on various screens are defined here.

For example, in the case of ***GoGlobal.com***, multiple Web pages are created that are linked to each other. Each of these pages should have a consistent look with respect to appearance, theme, and the color schemes used. The font styles, color of the labels, design and appearance of the command buttons, the appearance of header and footer, and the design and size of controls such as check boxes or text boxes should be consistent through all the forms.

For ***GoGlobal.com***, set your GUI Standards using the document '**SWD/ Form No. 4**' given in the ***Documentation Section*** of this Project Guide.

➢ **Designing the Interface**

Here, the layouts of the screens are designed in line with the **GUI Standards** set. Either these screens can be input forms, which accept user inputs, or Reports that display information to the user. In this phase, the content and appearance of the input forms and Reports are decided. The number of forms and the purposes of each form are decided here.

The navigation details of the entire application are also specified during this phase if the application has a browser interface.

The Interface Design is recorded in the Interface Design Document.

For ***GoGlobal.com***, you must record your ***Interface Design*** details in the document '**SWD/ Form No.5**' given in the ***Documentation Section*** of this Project Guide.

➢ **Designing the Database**

In this phase, the tables have to be created according to the Database design given in the project guide.

This phase is beyond the scope of the ***GoGlobal.com*** project.

➢ **Designing the Process Modules**

Process design involves translating the process definitions arrived at in the analysis phase into code modules. This module design is then expanded into program specifications. The types of validations needed to verify the functionality of each process in the project, are also specified in this phase.

For example, in the case of ***GoGlobal.com*** the modules could be for:

- Ad Management
- Customer Management

For ***GoGlobal.com***, you must record your **Process Design** details in the document '**SWD/ Form No.7**' given in the **Documentation Section** of this Project Guide.

➢ **Designing Coding Standards**

The process modules designed will be considered good only if they are standardized. Standardization involves setting up of naming conventions of program entities and database referencing, to name a few. Standardization helps to bring about better readability and easy maintenance of the code. Standard naming conventions make it easy to refer to program entities such as forms or modules. When standard naming conventions are used, the names of variables, forms and modules will denote their purpose even to a person other than the developer.

The teacher will show you how to set the Coding Standards using the ***GoGlobal.com*** case.

For ***GoGlobal.com***, you must define and state your ***Coding Standards*** in the document '**SWD/ Form No.8**' given in the ***Documentation Section*** of this Project Guide.

➢ **Building the Prototype**

Next, a Prototype of the application is created and shown to the client for approval. The Designer delegates the development of the prototype to the developer. The Prototype is a model of what the application would look like. The Prototype's screens allow the Client to view the User Interface of the application.

In case a browser interface is used, the Client gets an idea of the navigation sequence of the application.

The Prototype also helps the Client to understand the functionalities that will be achieved in the completed application. Once a Prototype is created, it needs Client approval. The Client has to give approval for:

- The navigation sequence of the application
- The look and appearance of the application
- The functions that will be performed by the application when fully developed

There is no document associated with the Prototype since the client is shown the prototype on the computer for approval.

Once all the ***Design Specification Documents*** have been prepared, they need Client approval, which is called ***sign-off***.

- *After the **sign-off,** the system is taken up for development. Now, if the client requests massive new additions or changes to be made, then a document known as **IMPACT ANALYSIS** is generated.*

- ***Impact Analysis** is a document which informs the client about the additional cost to be incurred as a result of the changes suggested by him and also the time delays involved due to the requested changes.*

After a Client gives a sign off on Impact Analysis, the requested changes are made.

During the Design Phase, the Project Leader also carries out the task of ***Assigning and Monitoring Tasks.***

- **Assigning and Monitoring Tasks**

  When the project development starts, the Project Leader needs to budget the number of person-hours required to complete the project. In order to do this, the Project Leader creates a '**Task Sheet**'.

  A task sheet is used for recording the following:

  - The number of man-hours required to complete the project
  - The planned start date of the project
  - The planned end date of the project
  - The number of members required in the project team
  - The Module name and specification allocated to each project member
  - The time required to complete each module
  - The progress status

With a Task sheet, the Project leader will be able to monitor and track the various phases of project development. It helps the Project leader to anticipate delays, and therefore become proactive and take preventive action.

For ***GoGlobal.com***, you are expected to fill the ***Task sheet*** as shown in the document '**SWD/Form No.9**' given in the ***Documentation Section*** of this Project Guide. The teacher will demonstrate how to fill the **Task sheet** using the ***GoGlobal.com*** case.

1.5.4 Development Phase

This phase involves the following:

- Giving the finishing touches to the User Interface built during the prototype
- Building the Database with the RDBMS tool
- Making the screens functional by adding code to them

For the ***GoGlobal.com***, you must now implement the User Interface using HTML5. You are required then to build the functionality by writing JavaScript code.

1.5.5 Evaluation/Testing Phase

This is the most crucial phase where each unit is tested for its functionality.

Test data is used to check if the module is able to process it without causing any errors. Test data may be live data extracted from existing records in the system, or dummy data.

Then, the individual tested modules are integrated and tested as a whole through its various paths.

During this phase, the Project leader reviews the developed system against each of the Customer Requirement Specifications and thus ensures that the developed system is able to resolve the Problem Definition completely.

After finishing the project, give it to your peers for testing the entire project. The project should be verified for the data entered by the customer in the various forms. The findings can be recorded in the document '**SWD/Form No. 10**'.

1.5.6 Implementation Phase

In this phase, the developed system is ported to the client's computers. The implementation engineer ensures that the installation procedure has been performed accurately. At the end of this phase, a final ***sign off*** is taken from the client.

This phase is beyond the scope of the ***GoGlobal.com*** project.

1.5.7 Maintenance Phase

In this phase, troubleshooting support is given to the Client. Depending upon external changes in the system, any software upgrades required by the application are performed.

This phase, again, is beyond the scope of the ***GoGlobal.com*** project.

1.5.8 Project Tracking and Monitoring Activities

During the Project Development Life Cycle, the Project leader and other team members follow certain monitoring procedures and practices which help to streamline projects and achieve the project objectives. These activities happen in parallel to the process of project development. The Project's successful completion depends on these activities. These are known as project reviews. A Review is a procedure used to check the progress of a project. It helps to understand and resolve constraints and to ensure that the project is progressing as per the Project Plan and will meet all Project Specifications, Guidelines, and deadlines.

Reviews can be:

- Internal Reviews-reviews conducted within the team members
- External Reviews-reviews conducted with the Client
- On a weekly or a monthly basis and can be conducted either through e-mails or in person

Review Minutes are recorded in the ***Project Review and Monitoring Reports*** document.

For the ***GoGlobal.com*** project, your teacher will conduct a review to understand the project status and record the findings of the ***Project Review*** in the document '**SWD/Form No.11**', given in the ***Documentation Section*** of this Project Guide. Finally, your project would be considered complete when you give a final demonstration of the project to the teacher.

During the demonstration, the teacher will fill and sign the '**Final Check List**' (document–'**SWD/Form No.12**') given in the Documentation Section. After this, furnish a spiral bound book consisting of the following documents:

- **Certificate of Completion**
- **Table of Contents**
- **Definition of the Problem**
- **Customer Requirement Specification Document**
- **Project Plan**
- **GUI Standards Document**

- Interface Design Document
- Coding Standards Document
- Process Description Document
- Task Sheet
- Integration Testing Report
- Review Report

1.6 Documentation Section

- Certificate of Completion

This is to certify that

Mr./ Ms _____

Has successfully Designed & Developed

_____

Submitted by:

_____

Date of Issue:_____

Authorized Signature:_____

➢ **Various forms required in the project**

Design Plan:	Document Name: Problem Definition Document	SWD/Form No. 1
Effective Date:	Version: 1	Page No.

Problem definition of GoGlobal.com–

Queries coming in from various customers are mostly related to information regarding companies and their products and could be one or all of the following:

1. What are the latest brands for a particular product?
2. How to find details about a particular product?
3. How to find details about a specific company?
4. What is the current price of a particular customized item?
5. How can I contact the manufacturer?
6. How many days will it take for receiving the product?
7. How will the product be shipped?

The management of GoGlobal have proposed that they should launch an advertisement Web portal named GoGlobal.com where a user will get relevant information about their favorite company and its products in the market and also be able to contact the manufacturer.

	Prepared By (Student)	Approved By (Teacher)
Date		

Design Plan:	Document Name: CRS	SWD/Form No. 2A
Effective Date:	Version: 1	Page No.

Client/Project Undertaken: _____

1. List of inputs to the system:

_____

_____

_____

_____

2. List of outputs expected from the system:

_____

_____

_____

_____

3. Overview of processes involved in the system:

_____

_____

_____

_____

4. Hardware and software required for implementing the project:

_____

_____

	Prepared By (Student)	Approved By (Teacher)
Date		

Design Plan:	Document Name: CRS/ Customer Acceptance Criteria	SWD/Form No. 2B
Effective Date:	Version: 1	Page No.

S.No	Customer's Acceptance Criteria
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

	Prepared By (Student)	Approved By (Teacher)
Date		

Design Plan:	Document Name: Project Plan	SWD/Form No. 3
Effective Date:	Version: 1	Page No.

Project Plan

1. Project details:

- **Name of the Client**:

  _____

- **Date of Project Plan**: _____

- **Project Vision/Objectives**:

(Define the project vision/objectives as stated by the client.)

_____

_____

_____

- **Scope**:

(Mention the scope of the project giving the locations that will be covered, processes, range of services, and so on.)

_____

_____

_____

_____

- **Our understanding of the client organization**:

(Give the range of services, functions, overview of processes, and so on.)

_____

➢ **Project organization with responsibilities and authorities**:

(Give the name of project team members their roles and responsibilities.)

2. Project initiation/requirement documents:

(Information required from the client as inputs regarding his system; could be the information about his services, processes.)

3. Deliverables:

(The documents to be handed over to the client–such as CRS, Design Document, Installation Manual, User Manual, Maintenance Manual, Code documents.)

4. Project dependencies:

Any event or task outside the scope of the project, which will affect the success of the project.

5. Major project milestones:

(Generating CRS, Building a Prototype.)

6. Quality plan:

- **Review activities** (Review meeting participants, frequency)

- **Testing activities** (Final Test)

_____

_____

_____

- **Backup and recovery strategies** (in case of disk crash, network failures)

_____

_____

_____

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_____

_____

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Date		

Design Plan:	Document Name: GUI Standards Document	SWD/Form No. 4
Effective Date:	Version: 1	Page No.

Document Design

Property	Value
Document theme and color scheme	
Form-Background color	
Title-Font size	
Title-Font color	
Title-Font style	
Title-Alignment	
Background color of controls on the form	
Foreground color of controls on the form	
Control caption-Font size	
Control caption-Font color	
Control caption-Font style	
Control caption and controls-Alignment	
Command button-Alignment	

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Date		

Design Plan:	Document Name: Interface Design Document	SWD/Form No. 5
Effective Date:	Version: 1	Page No.

1. List of forms to be created:

Document Name	Description	Controls on the Document

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Date		

Design Plan:	Document Name: Table Design Document	SWD/Form No. 6
Effective Date:	Version: 1	Page No.

Name of the Table	Table Description	Number of Fields	Primary Key	Related Tables	Foreign Key
				1. 2. 3.	

	Prepared By (Student)	Approved By (Teacher)
Date		

Design Plan:	Document Name: Process Design Document	SWD/Form No. 7
Effective Date:	Version: 1	Page No.

1. **Process name**:

_____

2. **Process description and details**:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

	Prepared By (Student)	Approved By (Teacher)
Date		

Design Plan:	Document Name: Coding Standards Document	SWD/Form No. 8
Effective Date:	Version: 1	Page No.

1. **Programming standards**:

2. Standards for code writing style:

3. Standards for declaring variables:

4. Standards for function declarations:

5. Other standards:

	Prepared By (Student)	Approved By (Teacher)
Date		

Design Plan:	Document Name: Task Sheet	SWD/Form No. 9
Effective Date:	Version: 1	Page No.

Project Ref. No.:	Project Title:	Activity Plan Prepared By:		Date of Preparation of Activity Plan:		
Task Sub division	**Description**	**Planned Start Date**	**Actual Start Date**	**Actual Days**	**Team Member Names**	**Status**
1. 2.						

	Prepared By (Student)	Approved By (Teacher)
Date		

Test Document:	Document Name: Testing Document	SWD/Form No. 10
Effective Date:	Version: 1	Page No.

S.No.	Features Tested	Remarks

	Prepared By (Student)	Approved By (Teacher)
Date		

Review Report:	Document Name: Project Review	SWD/Form No. 11
Effective Date:	Version: 1	Page No.

Date:	Project Plan Activity/ Milestone	Work Specification	Status of the Activity	Remarks	Responsibility

	Prepared By (Student)	Approved By (Teacher)
Date		

Final Check List

(This document has to be filled by the teacher only. The teacher will do a complete functionality testing of the application and add his/her findings and suggestions to this form.)

Test Document:	Document Name: Final Check List	SWD/Form No. 12
Effective Date:	Version: 1	Page No.

S.No.	Aspect tested	Suggestions/ Remarks
1.	Have all the modules been properly integrated and are they completely functional?	
2.	Does each unit meet its objective and purpose? Are all the validations happening as specified in Process Design?	
3.	Have all Design and Coding standards been followed and implemented?	
4.	Is the GUI design consistent all over?	
5.	Are the codes working as per the specification?	
6.	Does the application's functionality resolve the client problem, and satisfy his needs completely?	
7.	Have the hardware and software been correctly chosen?	
8.	Additional features and utilities that give value addition to the entire project.	

	Prepared By (Student)	Approved By (Teacher)
Date		

1.7 Source Code

This section shows a sample source code for the Web site.

```
<!DOCTYPE html>

<html>

   <head>

      <title></title>

      <meta http-equiv=”Content-Type” content=”text/html; charset=UTF-8”>

   </head>

   <body>

      <table border=”4” width=”1000px”>

         <!-- FIRST ROW-->

         <tr >

               <td height=”80px” style=” border-color: saddlebrown; border-width: 4;  width: 55px”><img src=”images/logo.jpg” width=”80” height=”80”/></td>

              <td style=”background-color: darkblue; color:violet; font-family: monospace; font-style: italic; font-size: 10; text-align: center; “><H1>SAMPLE WEB PORTAL</H1></td>

            <td width=”80px” style=”background-color: white; color: black”>

               <script language=”javascript”>

                  today = new Date();

            document.write(“<BR>Date: “, today.getDate(),”/”,today.getMonth()+1,”/”,today.getFullYear());

             document.write(“<BR>Time: “, today.getHours(),”:”,today.getMinutes());

              function calculate() {
```

```
var num1 = document.getElementsByName('textbox1')[0].value;
var num2 = document.getElementsByName('textbox2')[0].value;
if(num1.length <1  || num2.length < 1)
{
   alert("Please provide two numbers");
}
else
{
   var action = document.getElementsByName("Calc");
   var num3;
   if(action[0].checked == true) {
      num3 = Number(num1) + Number(num2);
   }
   else if(action[1].checked == true)    {num3 = Number(num1) - Number(num2);}
   else if(action[2].checked == true)
   {num3 = Number(num1) * Number(num2);}
   else if(action[3].checked == true)
   {num3 = Number(num1) / Number(num2);}
   else
   {num3 = 0;}
     document.getElementsByName('textbox3')[0].value = num3;
```

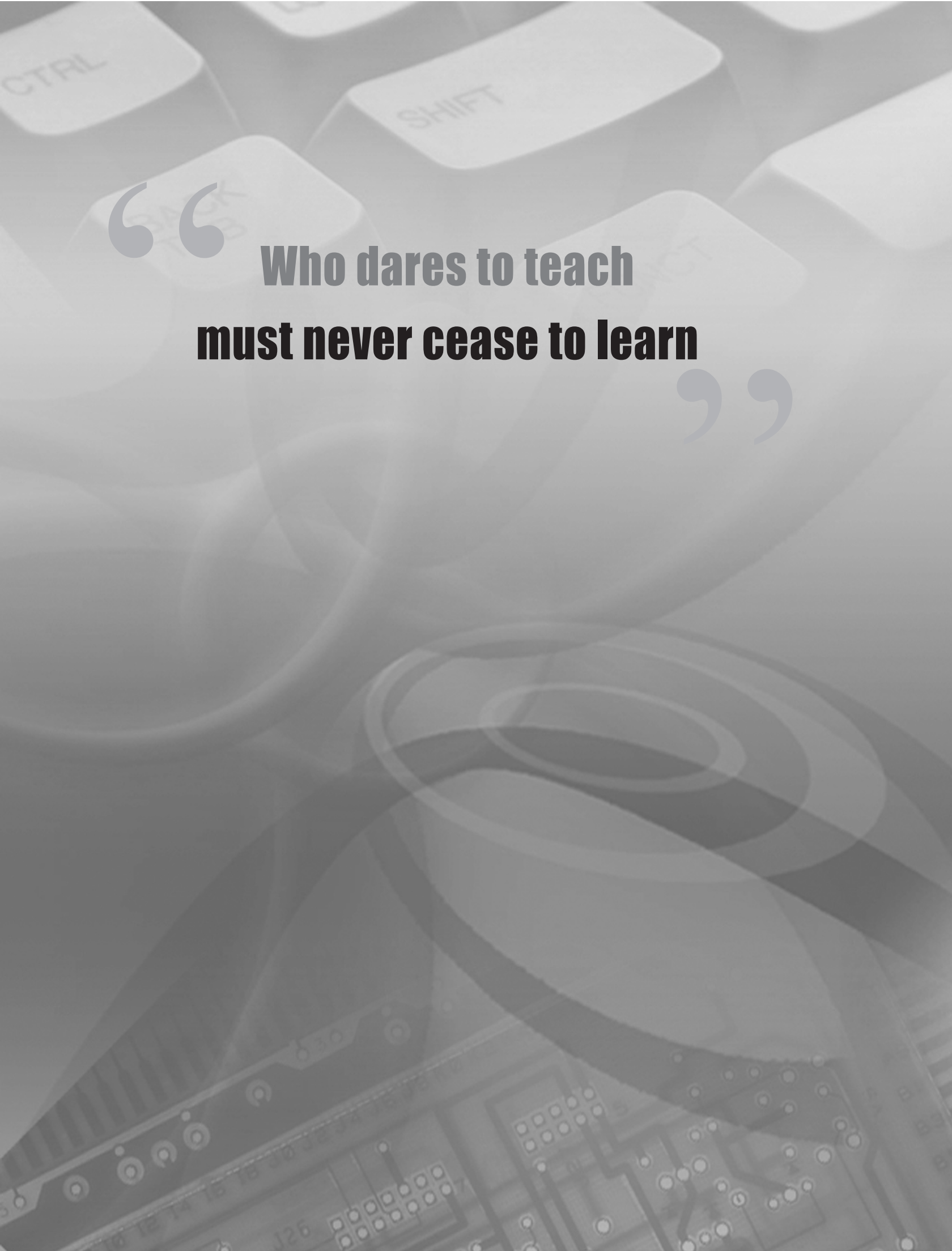
```
            }
        }
    </script>
    </td>
</tr>
<!-- FIRST ROW-->
<tr>
    <td height="480px" style="vertical-align: top; background-color: darksalmon;">
        <BR/>
        <BR/>
        <a href="Company1.html" target="_blank">Company1</a>
        <a href="www.sample.com">Company2</a>
        <a href="www.sample.com">Company3</a>
        <a href="www.sample.com">Company4</a>
    </td>
    <td style="vertical-align: top; ">
        <!-- Nested table -->
        <table  >
            <tr>
        <td style="text-align: center"><a href="geolocation.html" target="_blank"><img src="images/
globe1.jpg" width="80" height="80"/></a></td>
            <td style="text-align: center"><a href="http://www.makemytrip.com/" target="_blank"><img
```

```
src="images/travel.jpg" width="80" height="80"/></a></td>

            <td style="text-align: center"><a href="http://www.nationallibrary.gov.in/" target="_blank"><img
src="images/library.jpg" width="80" height="80"/></a></td>

            <td style="text-align: center"><a href="http://www.fashionara.com/" target="_blank"><img
src="images/shopping1.JPG" width="80" height="80"/></a></td>

        <td style="text-align: center"><a href="http://armorgames.com/" target="_blank"><img src="images/
game1.png" width="80" height="80"/></a></td>

         <td style="text-align: center"><a href="http://taxum.com" target="_blank"><img src="images/etax.
jpg" width="80" height="80"/></a></td>

            <td style="text-align: center"><a href="http://abc.com" target="_blank"><img src="images/
swservices.jpg" width="80" height="80"/></a></td>

        </tr>

        <tr>

            <td height="20px">Find Your Location</td>

            <td>Travel Travel</td>

            <td>Book Worms</td>

            <td>Shopper's Paradise</td>

            <td>Game Corner</td>

            <td>Know Your Tax</td>

            <td>Software World</td>

        </tr>

        <tr>

            <td colspan="7"> <article>

                <h1>Company A</h1>
```

```
<p>The proven, leading dealer in management software development. Designs equipments that are integrated industry-optimized, business process oriented, and provides a powerful impulse to the dealership bottom line.

<br/>For more information, contact 080-837-8474.</p>

Visiting day: <time datetime=”2013-06-26”>Wednesday</time>.

</article> </td>

</tr>

<tr>

<td colspan=”4”>

<h1>Sample Video</h1><br/>

<embed src=”videos/CloudComputing.mp4” style=”border-width: 2; border-color: plum” width=”300” height=”200” />

</td>

</tr>

</table>

</td>

<td style=”vertical-align: top; background-color: darksalmon;”>

<table border=”1”>

<tr>

<td>

Num1<input type=”text” name=”textbox1” id=”txtnum1” size=”4”/>

</td>

</tr>
```

```
<tr>
  <td>
    Num2<input type=”text” name=”textbox2” id=”txtnum2” size=”4”/>
  </td>
</tr>
<tr><td><label> <input type=”radio” name=”Calc” value=”Add” />Add</label></td></tr>
<tr><td> <label><input type =”radio” name=”Calc” value=”Sub”/>Sub</label></td></tr>
<tr><td> <label><input type =”radio” name=”Calc” value=”Mul”/>Mul</label></td></tr>
<tr><td> <label><input type =”radio” name=”Calc” value=”Div”/>Div</label></td></tr>
<tr>
  <td>
    <input type=”button” name=”btnsubmit” value=”Click” onclick=”calculate()” />
  </td>
</tr>
<tr>
  <td>
    Ans <input type=”text” name=”textbox3” id=”txtnum3” size=”4”/>
  </td>
</tr>
<tr>
  <td><video src=”videos/CloudComputing.mp4” height=”80” width=”100”>
```

```
                    Video not supported
                </video>
            </td>
        </tr>
        <tr><td> Sample Video</td></tr>
    </table>
</td>
</tr>
<tr>
<td height="40px"></td>
<td style="background-color: darkblue; color:white"><H5> © 2013 Sample Inc</H5> </td>
<td>
<a href="http://www.facebook.com" target="_blank"><img src="images/fb.jpg" width="25" height="30"/></a>
<a href="http://www.twitter.com/" target="_blank"><img src="images/twitter.jpg" width="20" height="20"/></a>
</td>
</tr>
</table>
<div></div>
</body>
</html>
```


Who dares to teach
must never cease to learn

Reader's Response

Name Of Book : _____

Batch : _____ **Date :** _____

The members of the design team at Aptech are always striving to enhance the quality of the books produced by them. As a reader, your suggestions and feedback are very important to us. They are of tremendous help to us in continually improving the quality of this book. Please rate this book in terms of the following aspects.

Aspects	**Rating**			
	Excellent	**Very Good**	**Good**	**Poor**
Presentation style	☐	☐	☐	☐

Suggestion:

_____

_____

Simplicity of language	☐	☐	☐	☐

Suggestion:

_____

_____

Topics chosen	☐	☐	☐	☐

Suggestion:

_____

_____

Topic coverage	☐	☐	☐	☐

Suggestion:

_____

_____

Aspects **Rating**

	Excellent	Very Good	Good	Poor
Explanation provided	☐	☐	☐	☐

Suggestion:

_____

_____

Quality of picture/diagrams	☐	☐	☐	☐

Suggestion:

_____

_____

Overall suggestions:

_____

_____

_____

_____

Please fill up this response card and send it to:

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Your efforts in this direction will be most appreciated.