Higher International Diploma in Computing and Software Engineering

Student Name/ID Number	
Unit Number and Title	**Programing in PHP (unit 16)**
Course Title	**HID in Computing and Software Engineering**
Academic Year	
Assessor Name	
Assignment Title	
Issue Date	
Submission Date	

Unit Learning Outcomes
1. Understand the fundamentals of PHP Programming and its role in web application development. 2. Plan and design database driven web application 3. Implement Database driven web application using PHP 4. Evaluate and test the web application

Scenario and the Task

Assignment Brief.

Read the following scenario to develop dynamic web application system for given organization and write a report covering the given tasks. The web system documentation also needs to be included according to the given content within the report.
Note that the students would be assessed for the originality effectiveness and quality of the application development.

Scenario

"Southern Pearl" is a newly started modern hotel in Hikkaduwa, especially made for the both foreigners who visits Sri Lanka and for local customers who stays and enjoys their holidays here for low rates. It explores the surrounding beaches, countryside, vibrant nightlife and the sun kissed beaches of southern Sri Lanka. Providing you with the perfect accommodation for your beach vacation, there is no better place to experience this enchanting city than Southern Pearl, Hikkaduwa. Famed for its shallow fringing reef, Hikkaduwa is perfect for water sports such as snorkeling, scuba diving, surfing and glass bottom boat rides.
As well as, customers can arrange their especial functions in here like birthday parties, Office year-end parties, etc. as they have enough space; they can arrange these without disturbing to occupier customers. Now they plan to develop a website to promote their business.
As their requirement, they need to develop this website to browse all their available services easily. They have 6 Deluxe Rooms, 5 Superior Rooms and 6 Eco Budget Rooms, which all these rooms are facing to Hikkaduwa beach.
Now you need to develop this "Southern Pearl" website to promote their business and to show natural beauty of this area. Moreover, develop this web for online booking for rooms or any other function.
When you develop this website, you need to use proper CSS, JavaScript and other PHP based functions to develop this site more attractive and user friendly.

Web site should full fill bellow mentioned requirements

- Use levels of Authentication. (ex: Admin levels and user levels)
- Backend functionality (Database)
- Online registration

- Package searching
- Use proper error handling methods.

Note: You can add more functionality with clearly mentioned assumptions

1. Web server and Server-side scripts play major role in web development process. Identify popular server side scripting languages and compare them. Discuss and compare different web server environments. explain what is web server and why it is important **(Marks 10)**

2. The requirements specification document is used to record the user requirements for the web site. Build detailed requirements specification document for the given situation. **(Marks 10)**

3. Design a suitable web solution to meet the given requirements. Provide necessary diagrams including ER diagram and relational schema. Necessary user interfaces to interact with users (**Marks 20**)

4. Implement a database driven web application based on the design (**Marks 10**).

5. System demonstration(**Marks 20**)

6. Organizations are always need to test and evaluate their web-based applications before the launch Discuss web application testing methods prepare a test plan and possible test cases, test the system according to the test plan, and identify inconsistencies. ***(*Marks 10)**

7. Prepare the documentation covering given tasks. ***(*Marks 20)**

This submission will be assessed as follows	**Depth of the task**
TASK 1	Identify popular server side scripting languages and compare them. Compare different web server

	environments. Explaining what is web server and why it is important.
TASK 2	Detailed requirements specification document using proper format
TASK 3	All the necessary diagrams such as ER diagram and relational schema. Necessary user interfaces to interact with users
TASK 4	Use of slandered codes ,naming conventions, special features
TASK 5	Well prepared fully functional system demonstration.
TASK 6	System testing with proper test pan and possible test cases
TASK 7	Provide technical documentation covering all the tasks

This submission will be assessed as follows	**Total marks Allocated**	**Marks obtained by the student for the answer provided**
TASK 1	10	
TASK 2	10	
TASK 3	20	
TASK 4	10	
TASK 5	20	
TASK 6	10	
TASK 7	20	
Total Marks	**100**	

Assessment Criteria

This submission will be assessed as follows	**Total marks Allocated**	**Marks obtained by the student for the answer provided**
Task 1 Understand the basics	Marks 10	
Poor • lacking in identification of server side languages and web server environment • Irrelevant contents are given • No in text citation is given	0-4	

Satisfactory • Identify two server side-scripting languages with basic comparison. • Identification one web server environment and basic explanation. • Few in text citations are given	4-6	
Good • Use of proper format and criteria's for the comparison • Identifying different server side scripting languages (minimum 3.) Good comparison • Identify more than one webserver and detailed explanation by comparing environments.	6-7	
Excellent • Identification of new technologies in web server environment • Use of proper criteria and critical evaluation • Proper justification for the selections with own arguments(web server and server side scripting)	7-10	
Task 2 Requirement gathering	Marks 10	
Poor • No or very poor evidence for requirement gathering • SRS no proper format and contents • Functional requirements are not relevant	0-4	
Satisfactory • SRS document with proper format	4-6	

• Some of the contents under each heading of the SRS some of the functional and non-functional requirements.		
Good • Use of proper format for the SRS document • Appropriate detailed contents under each heading of the SRS document • Proper Project scope, solution clear functional and non-functional requirements	6-7	
Excellent • Critical evaluation all the functions mentioned in the SRS documents. • Very clear and innovative solution is given	7-10	
Task 3 System design	Marks 20	
Poor • Lack of understanding the basic principles of design database driven web site • Poor logical design and lack of user friendliness • No proper identification of entity, attributes and relationships in ER diagram • Use of wrong notations in all the necessary diagrams	0-8	
Satisfactory • Satisfactory level of understanding the basic principles of design database driven web site • logical design with minor mistakes and less user-friendliness	8-12	

• identification of relevant entity, attributes and relationships in ER diagram • Use of notations with miner mistakes		
Good • Good level of understanding the basic principles of design database driven web site • Proper identification of relevant entity, attributes and relationships in ER diagram and relational schema • Basic explanation with justification of the given diagrams. • Completeness, correctness and use of proper symbols	12-14	
Excellent • Use of effective judgments in designing database driven web site • Innovative ideas and clear assumptions with proper justifications • Effective ER diagram to show the well understanding of the business domain and business rules • Well normalized relational schema with clearly mentioned normalization steps	14-20	
Task 4 System implementation	Marks 10	
Poor • No proper standard coding • Inefficient code wrong use of program logic.	0-4	
Satisfactory • Code samples from own program with basic explanations	4-6	

Good • Use of structured coding .enhance the readability and maintainability use of comments and proper naming conventions • Very clear examples of important code parts and other screen shots appropriately from own system. Proper justification of why it is important	6-7	
Excellent • Use of specific features of the language with proper justification of how it is useful in the given program implementation.(arrays structures, functions) • Use of very clear innovative assumptions • Use of framework with proper justification of why you selected this specific frame work what are the advantages of using this for the implementation.	7-10	
Task 5 System demonstration	Marks 20	
Poor • System with syntax and logical errors • Poor implementation of core functions given in the SRS(implementation of one function or none) • No data manipulations	0-8	
Satisfactory • Error free functional web site. • Demonstrate the system without proper preparation. • Use of basic validations techniques • Basic data base handling transactions.	8-12	

Good • Well-designed error free fully functional interactive system with proper data base handling transactions. • Well prepared system demonstration with good communication skills. • User friendliness of the interfaces use of appropriate user-friendly messages and instructions • Appropriate use of all the possible validation techniques • Use of error handling • Use of security features	12-14	
Excellent • Implementation of innovative ideas with valid arguments • Use of advanced security features • completeness, consistency	14-20	
Task 6 System testing	Marks 10	
Poor • No proper technique is selected • No proper format to document testing • Lack of evidence or no evidence for the testing	0-4	
Satisfactory • Selecting testing technique • Basic level of testing test plan with few test cases. • Test results attached with the document.	4-6	

Good • Use of appropriate testing techniques with proper justification for the selection. • Use of proper test pan and all the possible test cases. • Screen shots and other evidence for the test results	6-7	
Excellent • Evidence of critical analysis of test results and conclusion. Any discrepancy and the given solution. • Use of different tools for testing.	7-10	
Task 7 Technical documentation	Marks 20	
Poor • Poor document structure no clear examples and ambiguous contents. • No evidence of referring range of sources • Poor conclusion • No proper user manual	0-8	
Satisfactory • Acceptable standard of documentation with page numbering and table of contents. • Evidence for referring range of sources to complete given tasks • Acceptable conclusion • Basic user manual without proper format	8-12	

Good • Professional standard of documentation backed by clear examples and good explanation, page numbering and proper table of contents • Reference and bibliography using Harvard reference. • Conclusion with clearly mentioned program strengths and weakness. • Use of time line for the management of the project • User manual with proper format and clear instructions	12-14	
Excellent • Excellent academic writing throughout the documentation. Body citation no overlapping contents and professional conclusion • No ambiguity • Detailed timeline with proper justification	14-20	
Total Marks	**100**	

Submission Guidelines

- Submission format Report
- Paper Size: A4
- Words: 3000 words
- Printing Margins: LHS; RHS: 1 Inch
- Binding Margin: ½ Inch
- Header and Footer: 1 Inch
- Basic Font Size: 12
- Line Spacing: 1.5
- Font Style: Times New Roman
- **Referencing should be done strictly using Harvard system**

Assignment Submission Guidelines

Please adhere to the given guidelines when submitting the assignments.

1. Attach the **cover sheet** (provided by us) to your assignment.

2. Fill the relevant spaces in the cover page- Program, your name, Assignment Title, and submitted date in the relevant spaces of the coversheet.

3. Learner Declaration given in the cover page **should be marked** accurately with your signature and date.

4. **All the tasks should be in one document.**

5. Name your assignment (word document) as MODULE NAME_YOUR NAME
   eg: SM, OM, PD_ (Your name)

6. Do not send the cover sheet and your assignment separately.
7. Send your assignment in original word document. PDF files are not accepted.

Please email your assignments to kavindi.k@aibt.education not to the lecturer.

- **Subject of the email**- HID Com and SE Assignment Submission|"Module name" and "Your name"

Please strictly follow the instructions given, assignments sent without adhering to the given guidelines are not accepted.