Interfaz de usuario gráfica, Aplicación

Descripción generada automáticamente

**Assessment Task 2: Project Portfolio**

## **Pre-assessment checklist**

## **Purpose**

The pre-assessment checklist helps students determine if they are ready for assessment. The Trainer/Assessor must review the checklist with the student before the student attempts the assessment task. If any items of the checklist are incomplete or not clear to the student, the Trainer/Assessor must provide relevant information to the student to ensure they understand the requirements of the assessment task. The student must ensure they are ready for the assessment task before undertaking it.

## 

## **Information for students**

* Please make sure you have completed the necessary prior learning before attempting this assessment.
* Please make sure your Trainer/Assessor has clearly explained the assessment process and tasks to be completed.
* Please make sure you understand what evidence is required to be collected and how.
* Please make sure you know your rights and the complaints and appeal process.
* Please make sure you discuss any special needs or reasonable adjustments to be considered during the assessment (refer to the Reasonable Adjustments Strategy Matrix and negotiate these with your Trainer/Assessor).
* Please make sure that you have access to a computer and the internet (if you prefer to type the answers).
* Please ensure that you have all the required resources needed to complete this Unit Assessment Task (UAT).
* Due date of this assessment task is according to your timetable.
* In exceptional (compelling and compassionate) circumstances, an extension to submit an assessment can be granted by the Trainer/Assessor.
* Evidence of the compelling and compassionate circumstances must be provided together with your request for an extension to submit your assessment work.
* Request for an extension to submit your assessment work must be made before the due date of this assessment task.

## **Reasonable adjustments**

* If student has requested a reasonable adjustment, then complete the reasonable adjustment form included in the unit information pack.

## **Student declaration**

* I confirm that Trainer/Assessor has provided all the information related to the assessment task as included in the information for student section and I am ready for the assessment.

| Student signature |  | Date |  |
| --- | --- | --- | --- |

**Assessment task instructions**

**Assessment type:**

* Unit Project

**Instructions provided to the student:**

**Assessment task description:**

* This is the second (2) unit assessment task that student has to successfully complete to be deemed competent in this unit of competency.
* The student is required to complete five activities.
* Activity 1: Database requirements
* Activity 2: Documentation submission and feedback
* Activity 3: Database connectivity with website
* Activity 4: Test the connectivity
* Activity 5: Update database
* The student must attempt all criteria to the required level, e.g., Assessment criteria mentioned in the performance checklist to be deemed satisfactory in this task.

**Applicable conditions:**

* Activity 1 is untimed and conducted as an open book test (this means the student can refer to textbooks or other learner materials during the test).
* Activity 2, 3, 4 and 5 are timed.
* The student must complete the task independently.
* No marks or grades are allocated for this assessment task. The outcome of the task will be Satisfactory or Not Satisfactory.
* Trainer /Assessor must assess student’s practical skills, technique, and knowledge as he/she completes this assessment task.
* The Trainer/Assessor may ask the student relevant questions on this assessment task to ensure that this is his/her own work.

**Resubmissions and reattempts:**

* Where a student’s performance is deemed not satisfactory after the first attempt, a resubmission attempt will be allowed. Assessor must note any such submissions.
* Student may speak to their Trainer/Assessor if the student has any difficulty in completing this task and requires a reasonable adjustment (e.g., can be given as an oral assessment).
* For more information, please refer to the RTO Student Handbook.

**Location:**

* This assessment task may be completed in (tick the relevant box):

| ☐ Learning Management System | ☐ Classroom |
| --- | --- |
| ☐ Simulated learning environment | ☐ Workplace |
| Other: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | |

**Purpose of the assessment:**

* Purpose of this project is to check skills and knowledge related to performance criteria and performance evidence of the unit.

**General Instructions for attempting the project:**

* Student must complete all the activities of this assessment task.
* Answers must demonstrate an understanding and application of relevant concepts, critical thinking, and good writing skills.
* The student must complete all the provided templates (if any).

**Resources required to complete the assessment task:**

* Access to learner guide and other learning materials.
* Computer
* Internet
* MS Word
* Printer or e-printer
* Unit Assessment Task

**Scenario**

Future IT is an IT company which provide different IT services such as application development, technical issues resolution, software support and other services. It is operating all across Australia with the branches in major cities such as Melbourne, Sydney, Perth and Brisbane.

It has around 133,240 clients and has is providing services to them from the last five years. The company has been consistent with providing services and is giving tough competition in the industry.

Future IT has a database where all the information is stored about client purchase, complaints, service provided, employees data, admin information, accounts information.

Future IT have their website as well, and they have encountered that the website is not linked to the database, so it is hard to retrieve data from the database with the help of the website.

You are working with Future IT from the last five years as a database developer, and you need to integrate the database with the website.

You will have access to the following resources:

* Computer
* Internet
* Website code (HTML or PHP)
* Webserver
* Database
* MySQL

Future IT needs that the database should have the following features:

* Flexibility
* Accessibility
* Security
* Scalable

You are aware that the previous database needs to be upgraded, and the reason for the up-gradation is:

* More security to database
* Enhanced features
* Maintenance cost is less

You need to understand the organisational requirements and integrate the database with the website. To do so, you need to complete the following activities.

**Database requirements:**

Future IT wants to build a database for its new branch. The database needs to have this information stored:

* Employees data: name, role, location, date of birth
* Wages: role, salary
* Services provided. They have 5 different types of services with different prices each
* Clients: client name, address, date of contract and services (a client can purchase more than 1 service)

**Activity 1: Database requirements**

**Questions to discuss:**

You need to read and understand the given scenario prior to start this activity.

| **Your task** | In this activity, you need to prepare a report on the requirements for connecting the database to the website.  In the report you need to cover the following information:   * Introduction * Organisational database requirements * User input requirements * Requirements for technical upgradation * Integration plan for database connectivity * Conclusion |
| --- | --- |
| **You will be required to complete** | You need to prepare a report on database requirements. To complete the report, you need to research over and understand the scenario. Complete the following Template 11: Report on database requirements and submit it to your Trainer/ Assessor. |

| **Template 1: Report on database requirements** |
| --- |
| **Introduction**  The Sushi Bar & Restaurant is a family company that works in the food sector for a long time. They want to change the way that it works to have more control about incoming and outgoing sales. This document aims to show what was developed for the: 1. Requirements for organizational and user input database; 2. Requirements for technical upgrade; 3. Integration plan for database connectivity. |
| **Requirements for organisational and user input database**  The Sushi Bar & Restaurant needs a data bank because they want to start controlling incoming and outgoing sales. They still make their sales manually without using any system. Now, the restaurant owner wants to implement an online ordering system for take-home orders and in-restaurant orders. All orders must go through the system. Customers who purchase take-home will use the website to purchase and in-restaurant customers will use the QR code**.** The data-bank will centralize every information about this company and their sales. |
| **Requirements for technical upgradation**  The database will have a solid structure. This company has been working for a long time in this market. This has a well-known specific modus operandi. However, this company needs to be able to insert new plates in their menu sales. It will be possible if:   * Follow the standard procedure requirements to build a new plate. * Follow the standard procedure requirements to the security system. |
| **Integration plan for database connectivity**   1. Discussion about how the company works 2. Get requirements 3. Do normalization 4. Implement database 5. Test the implement in their modus operandi 6. Integrate in the website 7. Test the integration with website |
| **Conclusion**  After initial contact with the company, a first development plan was defined with the database based on the business needs of the company's modus operandi. This is a first briefing on some important points to be highlighted at the beginning of the development process. The next steps will be to carry out an in-depth analysis of the company's operational processes to begin developing the database. It is worth noting that these companies have a solid system of operations carried out for many years and that this will be the basis for the development of the database. |

**Activity 2: Documentation submission and feedback**

**This activity is a continuation of the previous activity.**

| **Your task.** | For this activity, you need to conduct a meeting with your manager regarding the report prepared in the previous activity.  One of your classmates will act as your manager and discuss the past issues with the database connections.  In the meeting, you need to discuss the following:   * Discuss the findings of activity 1 * Obtain feedback from the manager * Highlight ways to address the feedback * Submit the findings * Discuss database credentials * Discuss different ways to establish a connection |
| --- | --- |
| **You will be required to complete.** | You need to conduct a meeting and discuss the report prepared in the previous activity. You also need to complete the following meeting minutes template and write the information related to the meeting discussion.  You need to submit the completed meeting minutes document to your assessor.  Your trainer will observe your performance and complete the following performance checklist. |
| **Timeframe** | You need to complete the meeting in 7-10 minutes |

| **Meeting minute template** | | | |
| --- | --- | --- | --- |
| **Minutes of Meeting**  **Meeting Objective:**  **Attendees:**  **Venue:**  **Date:** | | | |
| **No** | **Points Discussed** | **Actions Suggested** | **Target Date** |
|  |  |  |  |
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**Activity 3: Database connectivity with website**

**This activity is a continuation of the previous activity.**

| **Your task.** | In this activity, you need to set up database credentials and connect the database with the website of the organisation using an appropriate programming language. You need to perform the following actions once the database is connected with the website.   * Setup credentials * Connect database with website * Use programming language to connect database with web application * Transfer data from a website to database |
| --- | --- |
| **Resources required** | You need to perform this activity in the computer lab. Your trainer will provide you the following resources to complete this activity.   * Website developed with HTML or PHP * Database (Your trainer will provide the existing database to perform this activity) * Webserver * Different browsers (Chrome, Firefox, Opera) |
| **You will be required to complete.** | You need to demonstrate the setup of database credentials with the website of the organisation using an appropriate programming language by following the steps provided in above section.  **Your trainer will observe you while you are performing the activity. Your trainer will complete the performance checklist at the end of the activity.** |
| **Timeframe** | You need to complete this activity within 3-4 hours. |

**Activity 4: Test the connectivity**

**This activity is a continuation of the previous activity.**

| **Your task.** | In this activity, you need to test the connectivity of the database on two different browsers.  To test the connectivity, you need to perform the following functions:   * Test connectivity of database * Retrieve data from the database with the help SQL query * Display data retrieved * Format data (Change the format of date and time) |
| --- | --- |
| **Resources required** | You need to perform this activity in the computer lab. Your trainer will provide you the following resources to complete this activity.   * Website developed with HTML or PHP * Database (Your trainer will provide the existing database to perform this activity) * Webserver * Different browsers (Chrome, Firefox, Opera) |
| **You will be required to complete.** | You need to demonstrate and test the connectivity of the database on two different browsers by following the above provided instructions.  **Your trainer will observe you while you are performing the activity. Your trainer will complete the performance checklist once you have completed the activity.** |
| **Timeframe** | You need to complete this activity within 2-3 hours. |

**Activity 5: Update database**

**This activity is a continuation of the previous activity.**

| **Your task.** | In this activity, you need to update the database by using appropriate SQL queries. Your trainer will provide you with the relevant information that needs to be updated in the database.  You need to use appropriate SQL queries to update the database. You need to perform the following functions while updating the database:   * Insert information in the database * Display data stored in the database * Delete the information from the database * Validate data * Check the database for errors |
| --- | --- |
| **Resources required** | You need to perform this activity in the computer lab. Your trainer will provide you the following resources to complete this activity.   * Website developed with HTML or PHP * Database (Your trainer will provide the existing database to perform this activity) * Webserver * Different browsers (Chrome, Firefox, Opera) |
| **You will be required to complete.** | You need to update the database by using appropriate SQL queries by following the above provided instructions.  **Your trainer will observe you while you are performing the activity. Your trainer will complete the performance checklist once you have completed the activity.** |
| **Timeframe** | You need to complete this activity within 2-3 hours. |