# STUDENT COVER SHEET

This sheet is to be used for all assignments.

**Student and Trainer/Assessor Details**

| **Student ID** | RC00003217 |
| --- | --- |
| **Student name** | IVY JERUTO |
| **Contact number** | 452355047 |
| **Email address** | [Ivychesoni5047@gmail.com](mailto:Ivychesoni5047@gmail.com) |
| **Trainer/Assessor name** | ASIF ZIA |

**Course and Unit Details**

| **Course code** | ICT50220 |
| --- | --- |
| **Course name** | Diploma of Information Technology |
| **Unit code** | ICTWEB513 |
| **Unit name** | Build dynamic websites |

**Assessment Submission Method**

|  |  |  |
| --- | --- | --- |
| ☐ By hand to trainer/assessor | ☐ By email to trainer/assessor | * ☐ Online submission via Learning Management System (LMS) |
| ☐ By Australia Post to RTO | ☐ Any other method \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  (Please mention here) | |

**Student Declaration**

|  |
| --- |
| * I certify that the work submitted for this assessment pack is my own. I have clearly referenced any sources used in my submission. I understand that a false declaration is a form of malpractice; * I have kept a copy of this assessment pack and all relevant notes, attachments, and reference material that I used in the production of the assessment pack; * For the purposes of assessment, I give the trainer/assessor of this assessment the permission to:   + Reproduce this assessment and provide a copy to another member of staff; and   + Take steps to authenticate the assessment, including communicating a copy of this assessment to a checking service (which may retain a copy of the assessment on its database for future plagiarism checking).   Student signature: \_\_\_\_\_\_\_IJ\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date: \_\_\_\_01/10\_\_\_\_\_/2023\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

# Assessment 2 - Unit Project

Due: **Week 3**

Grading: Satisfactory/ Not Satisfactory

This is an assessment project where an organisation will be simulated and the students need to work around the guidelines.

This Assessment Task relates to the following Learning Outcomes:

• analyse the technical requirements for a dynamic web site

• produce software design specifications

• create a website, using efficient and effective code to meet the technical requirements, and test and document a website against the requirements.

Instructions to complete this assessment task:

* Please write responses where applicable using a word processor.
* One task requires that you undertake a task in front of an assessor.
* You must include the following in the footer section of each page of the attached sheets:
  + Student ID or Student Name
  + Unit ID or Unit Code
  + Course ID or Course Code
  + Trainer and assessor name
  + Page numbers
* You must staple the loose sheets together along with the cover page.
* You must attach the loose sheets chronologically as per the page numbers.
* Correction fluid and tape are not permitted. Please do any corrections by striking through the incorrect words with one or two lines and rewriting the correct words.
* This submission must be well presented and follow the guidelines and instructions provided.
* Please follow the format as indicated in the template section below.
* One of the most important steps that you can take: proofread your answers and code.
* All AIBT policies are in effect, including the plagiarism policy.

Unit Project

Note: This project is continuation of ICTWEB441 final project.

**Scenario**

This project gives you the opportunity to ***develop, design*** and ***implement*** a dynamic web pages for a small business. This project will use many of the concepts and techniques we have covered throughout the unit.

The project allows you produce (plan, design and develop) a client-side script for dynamic web pages from scratch using the various application and development tools used throughout this unit.

**Scenario**

Website “We are stars”

You as a website developer need to communicate to “We are stars” management team to develop their dynamic website. The management team has a communications manager and CEO.

“We are stars” is to be a free platform aims to make sure that no talent goes unnoticed. Connecting the suitable talent with the perfect casting professionals is their motto. They have a member-based subscription available at the following price:

* Six months - $550 plus GST
* One year - $800 plus GST
* Lifetime access - $3500 plus GST

They guarantee to their members that potential candidates are selected by the most suitable agencies through sourcing only the strongest talent in Australia, and abroad, and extending their directory across a diverse range of talents from acting to influencing.

Although “We are stars” are an Australian-based talent management group, they also work with some of the industry’s largest companies, globally. This allows all local talent to partake in both local and international productions. “We are stars” knows no borders. They are here to assist all talent in reaching new heights and supporting them in promoting themselves…no one should go undiscovered.

At “We are stars”, they recognise the importance of people, but what makes them blush more is originality and commitment. For this reason, “We are stars”, too, is committed to clients and who they represent.

“We are stars” promise to their talent and casting professionals includes, but is not limited to:

* Understanding every clients’ distinct abilities and ambitions
* Employing their many skills for many outcomes – e.g. marketing, media, public relations, production and film
* Not stopping until the final product is a SUCCESS
* Access to a team with the finest in the industry through the three B’s- Brains, Business and Bright future- while retaining the three C’s –Calm, Cool and Collected
* 24-hours a day, 7-days a week commitment

The website will have a simple contact list, to begin with, and later developed to be a link up with Google plus, Twitter and Facebook to allow fans to follow them. The website will need to employ the three-layer application architecture (based on client-server architecture) to allow separation between user interface, programming logic and database operations. These separations should be observed as far as it is practical given the technology that you are working with.

The website will keep portfolios of all profiles. The website will cater the interests of age group 16 to 90 years. All individuals should be Australian citizens and must have sound English skills.

The communication manager is responsible for:

* Collecting information from potential talents
* Publishing a regular blogs and news section on the website
* Answering all messages received through “contact us form.”
* Communication with a web developer for setting up all non-functional requirements such as:
  + Performance – for example, Response Time, Throughput, Utilization, Static Volumetric
  + Scalability
  + Capacity
  + Availability
  + Reliability
  + Recoverability
  + Maintainability
  + Serviceability
  + Security
  + Regulatory
  + Manageability
  + Environmental
  + Data Integrity
  + Usability
  + Interoperability

The CEO is responsible for:

* Tagging the potential talents to different projects and titles such as acting, influencing etc.
* Communicating with stakeholders regarding the potential talents and different projects, i.e. communication with the talents directly and or through communication manager or production houses or other talent management organisations.
* Communication with a web developer for setting up all functional requirements such as:
  + Business Rules
  + Transaction corrections, adjustments and cancellations
  + Administrative functions
  + Authentication
  + Authorization levels
  + Audit Tracking
  + External Interfaces
  + Certification Requirements
  + Reporting Requirements
  + Historical Data
  + Legal or Regulatory Requirements

Communications Manager wants to have windows based operating system for the web server. You as a web developer knows that Linux is the most popular operating system for web servers. Since Linux-based hosting is more popular, it has more of the features web developers can explore. So, unless “We are stars” management have specifications to create a website which needs specific Windows applications, Linux is the preferred choice.

You have reviewed the requirements and found that they do not require the following Windows applications:

* ASP Classic
* ASP.NET
* MS Access (Microsoft Access)
* Visual Basic Development
* C#
* Remote Desktop (dedicated server only)

The requirements, though, include the following:

* SSH
* Scripts or applications that require specific Apache modules

It is a company policy that written consent is required from parents where the individual is below 18 years of age to use their name, voice, image, likeness, and any and all attributes of his/her personality, in, on or in connection with any film, audio tape, video tape, audio-visual work, photograph, illustration, animation, or broadcast, in any media or embodiment, now known or unknown, including, without limitation, all formats of computer-readable media, produced by or distribute by the company website.

This requires an additional functionality to ensure privacy and consent feature for all individuals below 18 years of age registering their interests on the website.

The CEO has advised you that she wants the website to be mobile-friendly and may introduce “pay-per-view” feature where short videos and documentaries of the potential talent will be available on the website as pay-per-view. The service in which viewers are required to pay a fee to watch a specific programme at the comfort of their homes.

A holistic review of what is involved in building a dynamic website can be found at the website below:

<http://www.adobe.com/devnet/dreamweaver/application_development.html>

The Website must include the following pages

|  |  |
| --- | --- |
| Homepage | *index.html* |
| About us | *page about the site topic* |
| Contact us | *a contact page* |
| Survey | *an evaluation survey.*  The survey needs to present the following marking criteria.   |  |  | | --- | --- | | **Point** | **Check** | | One text input field |  | | One HTML 5 new input element type |  | | One question requiring radio input |  | | One question requiring checkbox input |  | | One question requiring dropdown box(select) |  | | Each question section needs to be surrounded by |  | | “fieldset” with a “legend”. |  | | Each question option must have a <label > |  | | A background image |  | | Professional Design (Using colour scheme picker) |  | | The SUBMIT button for this survey Form should link to your email address. |  | |

### Project Specification

This part of the assessment task is in continuation of conceptualisation.

This assessment task requires the student to write a report on the given case scenario.

1. Identify and outline the business requirements of the website

The following information is required under legislative standards and organisational procedures:

1. Outline the objective or purpose of the website
2. Define the website expectations
3. Describe the Functional requirements
4. Describe the Non-functional requirements
5. Describe System Processes and Business Rules

* Every process within the system identified (as either in scope or out of scope), and each process in scope described with a standardised task-level description of how information moves between people and/or within the system.
* Trigger(s) to the process, post-conditions (what is true when the process ends) and process exceptions.
* Business rules that support the process documented
* Use Case Diagram - Actor(s) of the process (i.e., who interacts with the system?)

6. Outline the Website User Interface and Design Layout specifications

* Explain how users navigates the website
* Highlight any specific user needs
* Create detailed wireframes of the website and its interface that can be used as a prototype
* Define the platforms that target users will be browsing with
* Describe the design principles and aesthetics that are relevant and appealing to your users
* Create a sitemap/hierarchy of your website pages
* Confirm the content on the website is logical and understandable.

7. Define the Technical Requirements

* Define and explain the architecture of the website to include the following
* How your data is stored (Hosting / domain / databases)
* Coding languages to be used in the building of your website
* CMS or software used for your website (define the version)
* Additional software required in the construction of your website
  + Data required to support the process (data attributes) identified and objects or repositories with which these are associated.
  + Relationships among data required in the process

8. Outline the Risk Analysis and Management

1. Develop the website to the specific design
2. Create the components of the website. The website must:

* Be created using several coding languages: combination of HTML with CSS, JavaScript, PHP and SQL.
* Include at least **two** functionalities for the user (interface controls, galleries, community components, etc.)

1. Test the components of the website

Please use the following for the guidelines: https://www.softwaretestinghelp.com/web-application-testing/

1. Integrate the components to produce the web application

Finalise the design and development of your website and produce the production sample ready for the user acceptance

1. Test and evaluate the web application
2. Test the website against the requirements and make changes accordingly

Write a short report that evaluates your project and include the following:

1. How does the website perform and function based on your original specifications?
2. Screen shots of your final website (show the main pages and key features)
3. Explanation and supporting screen shots to explain what you use HTML/CSS/JS/PHP or other code to achieve.
4. Explanation of how you tested your website for different browsers and hardware. Include screen shots of your website working on Firefox, Chrome, and Internet Explorer
5. Explanation of how you tested your website components. Provide screen shots where possible.
6. Client’s feedback
7. Implement Cyber security procedures and protocols to ensure that website is free from bugs
8. Test the functionality and design of the website on different devices and multiple browsers and update as required.
9. Complete and document the design structure
10. Obtain client feedback and adjust web applications as appropriate

Hold a consultation with your client (tutor) who will advise of any changes they would like to make based on your specifications, choice of components and prototype. Record their feedback and document it in a written report so that these recommendations can be incorporated into your final website.

1. Export the website & submit all required documentation

Collate all documents, written codes and database together so that it can be archived as evidence. Save your project files onto the appropriate location and submit in the required format.

1. Observation

During your classes and workshops, the tutor will engage you with class discussions or individual questioning to gather evidence that you understand the required subject matter.

**Details of individual observation points are indicated below:**

a) Through direct questioning, the student has been able to summarise the principles of analysis and design. Key points should include:

• The need for analysing customer needs

• Researching and evaluating components

• Design aesthetics relevant to the client, their brand and audience base

b) Through direct questioning, the student has been able to summarise how programming of the website is controlled and how their website is structured in an appropriate manner.

c) Through direct questioning, the student has been able to summarise the following:

• How their website adheres to appropriate web security and authentication

• How their website uses ‘user’ sessions

• What HTTP is and what its relevance is to their website

• How stateless programming is used for HTTP sites (eg how the website uses functions that don’t rely on pasts data – EG, the GET function)