

Assessment Information for the Candidate:

ICTWEB517 - Create web-based programs

Candidate name:			
Employer:			
Contact phone:			
Date / time of assessment:		Location:	
Assessment Name:			
Assessment details			
Unit/s of Competency:	ICTWEB517 - Create web-based programs		
Assessor/s name:			
Approx. time required:			
Equipment / materials required:	Access to The internet PC with Visual Studio Code IDE or Visual Studio Community Programming standards Any required hardware Software development tools		
Assessment methods and tasks			
For this assessment you will be required to...	<ul style="list-style-type: none">• Prepare to create web application• Implement session management• Develop and finalise applications in a stateless environment.		
Allowable adjustments:	If the date and time of the assessment is not suitable for you, contact your assessor to make alternate arrangements. If you feel you will have difficulty completing these tasks due to disability or other condition, your assessor should already be aware of this because it was disclosed during your enrolment, however if you have concerns, please contact your assessor or student support.		
Appeal process:	Please consult the Appeals Policy located in your Student Information Pack for more detail. If you require a copy of this policy, contact your assessor or student support.		

Simulated Workplace Information

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Information about the simulated workplace business will appear in a box like this to guide learners as to what and where to access information.

Simulated Workplace assessment, follow the instructions provided for you in boxes such as this with the icon on the left.

Instructions – Web application

Note

While this assessment is set up to be a stand-alone assessment it can also be part of a larger project. If your course has the following two units, then you should review the assessment instructions for those two units before you commence this assessment.

1. ICTWEB430
2. ICTWEB441

If you do not have any other web units in your course, then continue with the assessment as it is.

Scenario

You have been asked to develop a web application or 'webapp' for a local Veterinarian practice. This project should be coded using (X)HTML, CSS & JavaScript or ASP.NET in an IDE like Visual Studio Code.

The website is a basic shop front type of website to promote the Vet's business. You are provided with information about the Vet and some other resources to complete this task. The Vet is a dog specialist but does treat other suburban pets. The Vet does not have any rural clients although is happy to see farm class animals as required.

The client would like to have no more than 4 pages.

1. A title page with the Business information with links to the other 3 pages.
2. The Second page is about its people and their Biographies.
3. The third page is about the services provided.
4. The last page has the location information and a map.

The client would like one animal graphic on each page. Which will change depending on if the user identifies as a 'Cat person', a 'Dog person' or 'both'.

The client, who is a dog specialist, would also like each dog owner to be able to add an account to become a member of the website.

The account creation process will require the following information to be entered by the account creator:

- First name
- Surname
- Contact phone number
- Email address



Assessment Information for the Candidate:

ICTWEB517 - Create web-based programs

- Suburb
- Postcode
- Pet name
- Pet breed
- Pet age
- Pet gender
- Photo (image) of pet

The webapp will be using the website membership database for members to send a Puppy Play Date request to other members.

The app will allow the members to search for other Dogs of the same breed or age or gender and send a request with a suggested day and time of the play date.

The members should not be able to see any personal data of the dog owners and the server will send an email request on behalf of the member requesting the date. They should know that their name and phone number will be given to the requested member if they accept the play date.

The receiving member should be emailed a link to the app, where they can login to accept or decline the play date. If they accept the play date, they will be made aware they will receive the other dog owners name and number to arrange the location etc. and their name and number will be provided to the requestor in the app.

The app needs to keep track of requests and acceptances and show the name and number of each party if the date is accepted. The members should be able to remove old requests and the system should remove declined requests after 7 days.

Note: If you have already created this website from a different unit assessment you are permitted to use that website as the basis for this assessment. You will need to add the required functionality listed.

PART 1

Note: Only do this part if you have not completed it in a previous assessment.

Use the information above and design the dynamic web pages. You must include a database in your design for the website.

Meet with the client, who will be played in this role play by your assessor or other person as directed by your assessor.

Simulated Workplace Information

Assessment Information for the Candidate:

ICTWEB517 - Create web-based programs



To complete this part of the project, you will need to conduct a roleplaying activity.

You will require access to:

- One (1) volunteer to assume the role of your supervisor
- Video camera or a mobile phone with video recording capabilities
- A safe environment to conduct the roleplaying activity

Submit the following to your assessor:

- Video recording of your roleplaying activity

The Third-Party Report Form will be completed by your assessor.

Data Sources

Use the information above and create a database that contains various pictures of Dogs and Cats. These must be identifiable by type.

Ensure when a user arrives at the website, they are presented with a pop-up document that asks the question to customise their experience whether they are a cat person or a dog person or both. This must trigger server-side scripts that will create a data set of images to load on each page. The data set is dependent on what is chosen.

If they choose 'cat person' then sufficient cat pictures are to be gathered to add to each image location on each page.

If they choose 'dog person' then sufficient dog pictures are to be gathered to add to each image location on each page.

If they choose 'both' then sufficient cat & dog pictures are to be gathered to randomly add to each image location on each page.

PART 2

Note: Only do this part if you have not completed it in a previous assessment.

Write the Web pages

Now that you have a draft design you will write the pages.
Create the dynamic pages using server-side scripting methods.

Considerations:

Accessibility

How embedded scripts will run

Testing and debugging the web page and document functionality

Security of the site and pages and data

Webserver and database

Test the website and reiterate as required.



Assessment Information for the Candidate:

ICTWEB517 - Create web-based programs

Use debugging from IDE or other sources.

Test page security

PART 3

Note: Only do this part if you have not completed it in a previous assessment.

User Accounts for dog owners

User accounts need to be kept in the database too, with the requirements as above.

Member fields:

- First name
- Surname
- contact phone number
- email address
- suburb
- postcode
- pet name
- pet breed
- pet age
- pet gender.
- Pet photo (image)

Note: Postcode and suburb must be validated against an external data source. Use and API link to the source, as described [here](#).

Create the documents to register as a member of the Vet Dog community.

Add functionality to Join/Login to the site.

Confirm the website meets the initial specification and requirement provided by your client by running the website up and conducting user level testing. These tests are to be documented with success and failure results recorded.

PART 4

Create a web application so members can arrange puppy play dates.

Build the app and integrate it with the website. It should be called from the webpage for members only to create play date requests.

Referring documentation for relevant business standards and procedures, design functionality as outlined below incorporating the required security, privacy and WCAG requirements.

The webapp will be using the website membership database for members to send a Puppy Play Date request to other members.



Assessment Information for the Candidate:

ICTWEB517 - Create web-based programs

The app will allow the members to search for other Dogs of the same breed or age or gender and send a request with a suggested day and time of the play date.

The members should not be able to see any personal data of the dog owners. The receiving members should be notified that their name and phone number will be given to the requested member if they accept the play date.

The receiving member should receive a notification when they log in if an invitation has been accepted and the name and phone number of the members provided.

The app needs to keep track of requests and acceptances and show the name and number of each party if the date is accepted. The members should be able to remove old requests and the system should remove declined requests after 7 days.

A key requirement is for the application to be able to continue to work if it loses contact with the server. This will require client-side coding and use of local state management. Activity undertaken by the user is to be collected and held in state management at least until the connection with the server is restored. The design must outline which state management process will be utilised and why.

To save traffic resources, you are to also incorporate server-side application state management to hold required information about users so there is not a need to access the database every time a request is made for user information.

Your submission document must include information about your use of client and server-side state management, why it is important to the application, and how you have implemented it. Incorporate an admin process via a link at the bottom of a page that collects and displays the information being held in both the client and server-side states.

Your application outline document to include with the submission must address the following points:

- Your choice of client-side state management and why (outlining limitations and benefits)
- Your choice of server-side state management and why (outlining limitations and benefits)
- An outline of why state management is required when developing a web application (outlining limitations and benefits of HTTP/HTTPS)
- Testing processes and any issues arising when checking application suitability in two different browsers and rendered in at least two different screen resolutions.

Submit your webapp and website and relevant project documentation to get feedback on it. This will be done by submitting your app, site and database to your assessor for grading. You assessor will provide feedback on your work and may request changes for resubmission.