

1. ER Diagram:

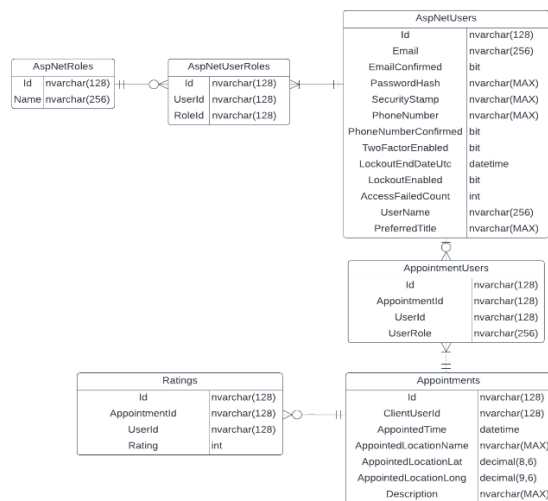


Figure 1: Entity Relation Diagram. Note that this ER diagram is still subject to change depending on new discoveries whilst I complete the implementation.

The ER Diagram above includes Business Requirements: B.2 (Date Storage), C.1 (Role-based Authentication), D4 (Booking Constraint) and E.2 (Geo Location, since I am storing latitude and longitude values of corresponding booking appointments).

2. Implementation of Controller with user registration and authentication.

The default controller providing authentication in my current project is AccountController. Which simply handles the authentication via MS Identity.

Link (I'm not taking a screenshot, as it's too long to fit in a single screenshot):

https://github.com/3drdsh3in/FIT5032/blob/master/assignments/portfolio/FIT5032_Assignment_Portfolio/FIT5032_Assignment_Portfolio/Controllers/AccountController.cs

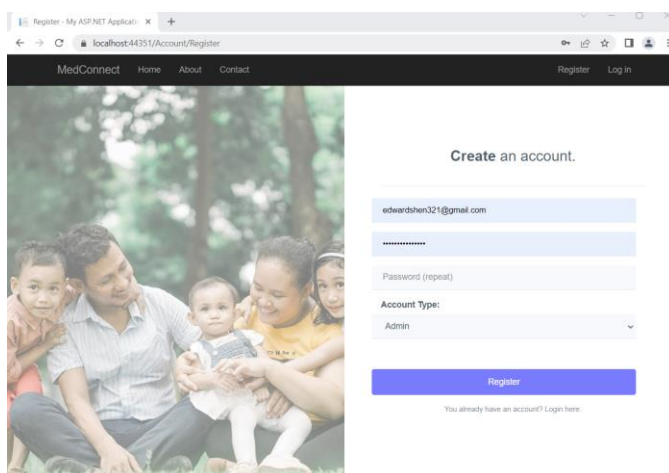


Figure 2: Registration Form

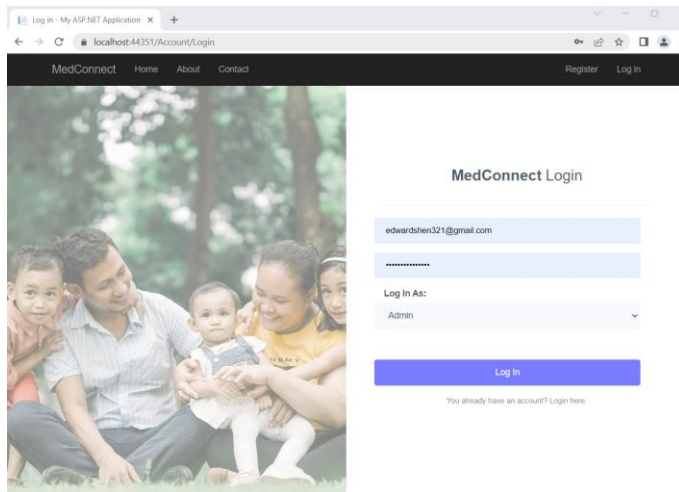


Figure 3: Logging In

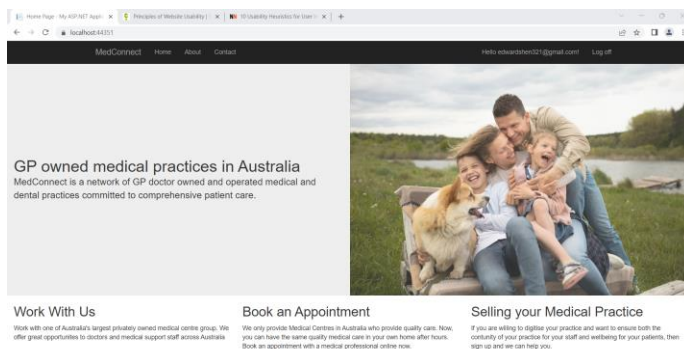


Figure 4: Log in Screen upon clicking Create or Login.

3. Implementation of any other Controller and Usability evaluation

Implementation:

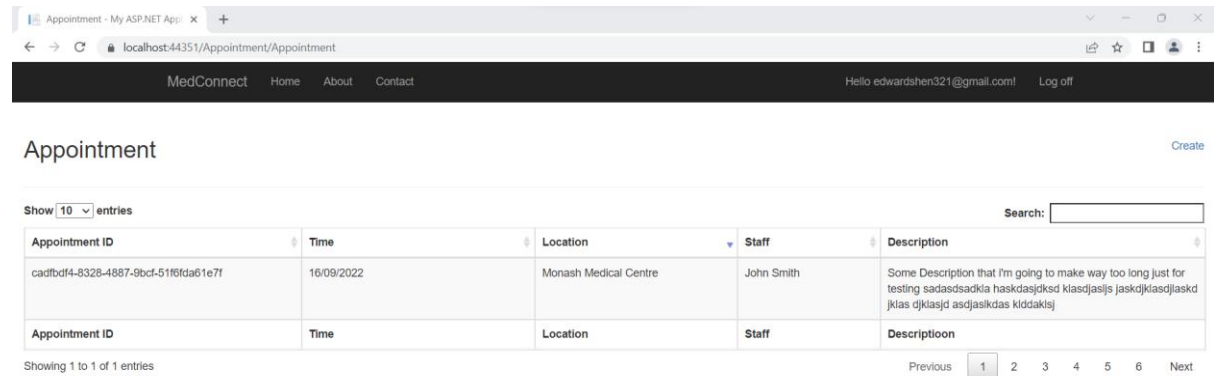
Link (I'm not taking a screenshot, as it's too long to fit in a single screenshot):

https://github.com/3drdsh3in/FIT5032/blob/master/assignments/portfolio/FIT5032_Assignment_Portfolio/FIT5032_Assignment_Portfolio/Controllers/AppointmentController.cs

Note that I'm not quite done with this controller. As of this submission only the Get Appointments Endpoint works to a standard, I deem barely acceptable (and even then, the UI still looks awkward). The Create Appointment Endpoint has been implemented in a primitive way to assist with testing

the table functionality and will likely be changed to meet other business requirements down the line (Hence, please disregard it entirely for marking).

Usability Evaluation of the web application:



Appointment

Show 10 entries

Search:

Appointment ID	Time	Location	Staff	Description
cad1bdf4-8328-4887-9bcb-51f0da61e7f	16/09/2022	Monash Medical Centre	John Smith	Some Description that i'm going to make way too long just for testing sadaasdadkia haskdasjdksd klsdjasjs jaskdjklasdjlaskd jklas djklsjd asdjasikdas klddaklsj
Appointment ID	Time	Location	Staff	Description

Showing 1 to 1 of 1 entries

Previous 1 2 3 4 5 6 Next

Figure 5: Desktop View of the current Table Implementation for booking appointments.

The current version of the web application is far from ideal when considering it from a usability standpoint. Common principles of good website design such as consistency (from Donald Norman's 6 Principles of Design). For Instance, without looking too hard at Figure 5. We can quickly notice misalignments of text against the vertical axis (The left edge of "MedConnect" title in the Navbar does not cleanly align with text beneath which makes reading text inconsistent on our website inconsistent with other parts of the website such as the Login/Registration screens where they do align). Additionally, this table does not consider the Constraint principle as there are many options (Example: Clickable Page Numbers even though there is only one entry in the table above to view)

However, despite these flaws, I do still think that the current implementation at the very least still possesses some level of visibility and recognisability as it's not hard to tell that the page in Figure 5 we are showing is attempting to display an interactive table of appointments (with all the search features etc...).

I still have a long way to go with polishing the UI/UX if I intend on keeping the web app competitive from a usability standpoint. To do this, I will have to better refine the site's responsiveness to desktop viewports to address the inconsistency on my web app regarding the misalignment. To further refine the UI, I will also eventually apply the Constraint principle by restricting my table UI to fewer options (Example: Only displaying the option to select the page numbers larger than 2 inside the table when there are enough rows in the table to completely fill those pages for the table in figure 5) to prevent any confusion when using the interactive table. The Mapping Principle could also be applied by adding more icons to my buttons and menus for a more intuitive feel. For any future work I will be keeping these principles in mind.