

DEVELOPMENT SOFTWARE (DSW02A1)

GROUP PROJECT (28 MAY 2021)

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Societal Problem

One of the societal problems that occur annually to most first or returning students at institutions is the fact that only a small percentage of students will get accommodation, leaving the rest stranded and lost without a place to stay. The problem at hand can be analyzed deeper, which is as follows:

- POSA (Privately Owned Student Accommodation) has useful information about student accommodation but there is no website to put the information out there for student reach.
- Students cannot Find affordable, convenient, legitimate, or even basic accommodation for their study year.
- When this happens, it leads to stress and exhaustion and eventually desperate students end up falling victim for accommodation frauds, human trafficking, settling for less (bad condition accommodation) This is especially a problem for foreign or further away students.
- Lost students end up staying at home where the environment is distracting and not convenient for studying.
- Most of the times when the student finds accommodation, it usually does not suite their needs or they have a terrible experience with it.

MyRes website

- This problem is not only one sided but two sided since most proper accommodations do not have the platform to advertise their residence to the right students, therefore residences cannot find students/tenants.

Solution to the problem:

The first solution to the problem will be to have the unreachable information from POSA be accessible and reachable to students by designing and creating a website for student accommodations. This website will also make sure that the information is legitimate and convenient for students to rely on. To limit frauds, lost students and human trafficking, the website will provide addresses, street pictures and actual pictures as well as links to the student accommodation. It will also provide filters for students to get what they specifically want in the list of accommodations. Students will also get to see reviews and ratings for the different residences to make sure they do not get the same unpleasant experience that previous students got. As part of the solution, different residences will register to have their accommodation accessible.

Narratives

(What does the website do?)

The intended use of the website that we have created is so to help students figure out how to get varsity student residential places. Make it easier for them, not just easier but also safer for them. As mentioned above, in the thesis regarding this societal problem that we have identified. As stated in the above societal problem description.

(What does the website contain?)

Website Features:

- Database to store accommodation details (name, contacts, address, classification, location, prices). This will not be seen by the user.
- Filters (prices, classification, sharing/single)
- Reviews (testimonials, comment forum)
- Accommodation SignUp/LogIn to have their residence on the website (through subscription)

MyRes website

- Links to legitimate student accommodation
- User friendly, easy to navigate interface.

Our website contains four webpages/forms which are:

- The **Homepage**, where one gets to understand what the website is about and what the purpose of the website is.
- The **Accommodation Registration Page**, this is where the accommodation managers or owners get to register their accommodation property and have a profile with us as stated above.
- The **Accommodation Profile Page**, this is where the manager/owner of the accommodation may edit their information as they please.
- And lastly the **Res Page** where it clearly shows every information and graphics of the accommodation, this is directed to the students seeking residence.

Most of our other features will be in the form of pop-ups, or links that direct the user to a different part of the web page. This is to make the website versatile, easy to use and to not feel heavy, with having unnecessary features.

(How will the website work(descriptive)?)

The website will cater for the user(student) in this manner:

- The user will be able to choose if they require an NSFAS accredited or non-NSFAS accredited accommodation.
- For ones that are not looking for NSFAS accredited accommodation they have the option to choose the price range suited to their budget.
- Furthermore, students are given the option to choose the kind of dorms they seek. Single, double sharing, triple sharing and so forth.
- This will give thorough information to the student about the accommodation. Information such as, the actual description of the accommodation, the contact details, the pricing, the location, and the pictures of not only the inside of the accommodation but also the street view, this is to prevent students from falling into dangerous situation, in entering wrong buildings as most may not be familiar with the environment around the institution.
- Students also have the choice to use a search button.

MyRes website

- For every accommodation that the students have searched and may have moved into, they have the option to comments and give reviews on the accommodation.

For the user (as the accommodation owner):

- The student's accommodation company can register to put their accommodation this website. The accommodation company will then have a profile whereby they can insert all their information.
- The registration page allows accommodation companies to insert all their information from their description to their contact detail, social media accounts, addresses and images of their properties.
- They are also able to go through the website after they have fully registered and put up all their information to see how the students feel about their accommodation through the reviews/ratings and gauge how well they are doing. This gives them the chance to fix whatever it may be that the users (who are students) may have problem with.

(What approach did we use, applications, languages to do what and so on?)

We have used **HTML/CSS** obviously for the designing part of making our website look pleasant.

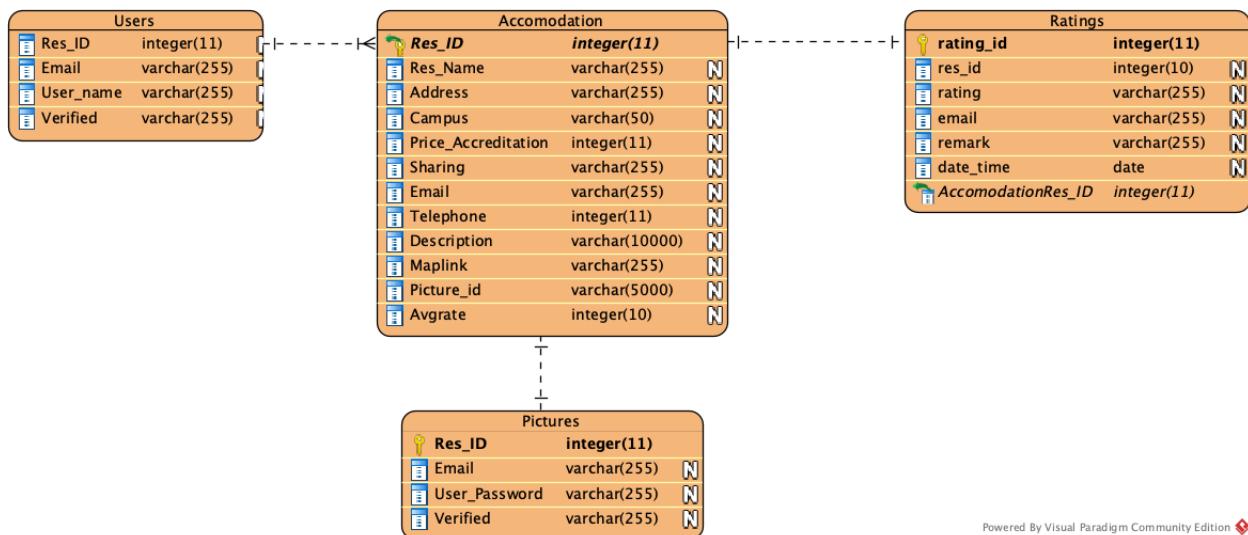
Our use of **JAVASCRIPT** was mostly for the functions and conditional statements, with regards to the getting the accommodation retrieved made to the amounts of the student's budget e.g., determining which accommodations to output based on the max or the min of the students, the filters and for sliders that make our website fascinating to look at.

We have used **PHP** to anchor the website from being a basic static website and making our website interactive and responsive.

The use of **SQL** databases in our website was for the data and information of the student accommodations. This is so we could retrieve and output every information for each of the accommodation on the residence accommodation page every time the user(student) searches and clicks on a specific accommodation.

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UML Diagram

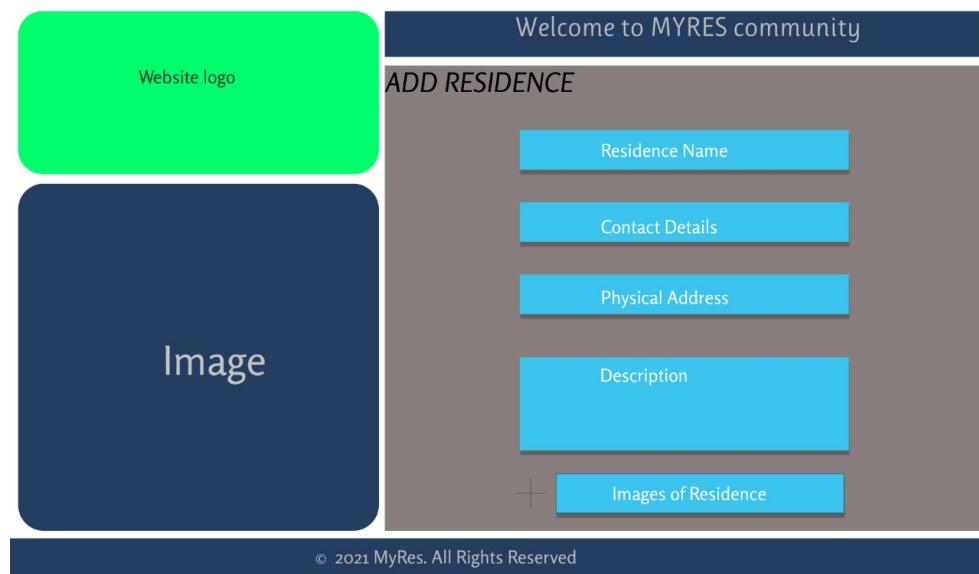


Sketches, Screen dumps

Homepage

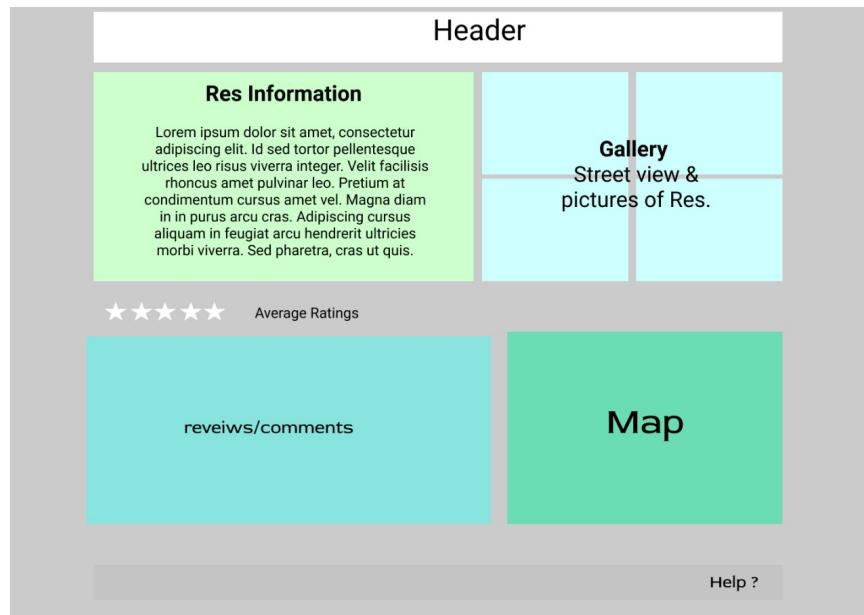


Registration page



The registration page features a header with the text "Welcome to MYRES community". Below it is a section titled "ADD RESIDENCE" containing fields for "Residence Name", "Contact Details", "Physical Address", and "Description". A blue button labeled "Images of Residence" with a plus sign is positioned below these fields. To the left of the main content area is a large green box labeled "Website logo" and a dark blue box labeled "Image". At the bottom of the page is a footer bar with the text "© 2021 MyRes. All Rights Reserved".

Residence accommodation page



The residence accommodation page has a "Header" section. Below it, the "Res Information" section contains a paragraph of placeholder text: "Lorem ipsum dolor sit amet, consectetur adipiscing elit. Id sed tortor pellentesque ultrices leo risus viverra integer. Velit facilisis rhoncus amet pulvinar leo. Pretium at condimentum cursus amet vel. Magna diam in in purus arcu cras. Adipiscing cursus aliquam in feugiat arcu hendrerit ultricies morbi viverra. Sed pharetra, cras ut quis." To the right of this is a "Gallery" section with the sub-label "Street view & pictures of Res.". Below the "Res Information" section is a row of five stars followed by the text "Average Ratings". The page also includes sections for "reviews/comments" and "Map". At the bottom is a "Help ?" link.

MyRes website

Profile forms

The profile form consists of several sections:

- Account Details:** Includes a placeholder image labeled "student accommodation profile image", fields for "Res name", "Res email", and "Res telephone no.", and a "CHANGE IMAGES" button.
- Log In Details:** Fields for "Name", "Email address", and "Password".
- Res Details:** Fields for "Telephone", "Price", and "Campus".
- Reviews:** A section for user reviews.
- Gallery:** A section for adding images, with a "ADD IMAGES" button.
- Description:** A section for updating the property description, with a "UPDATE DESCRIPTION" button.

Web layout mockups.

Home page

The home page features a sidebar with filtering options and a main area displaying three accommodation listings:

Filters:

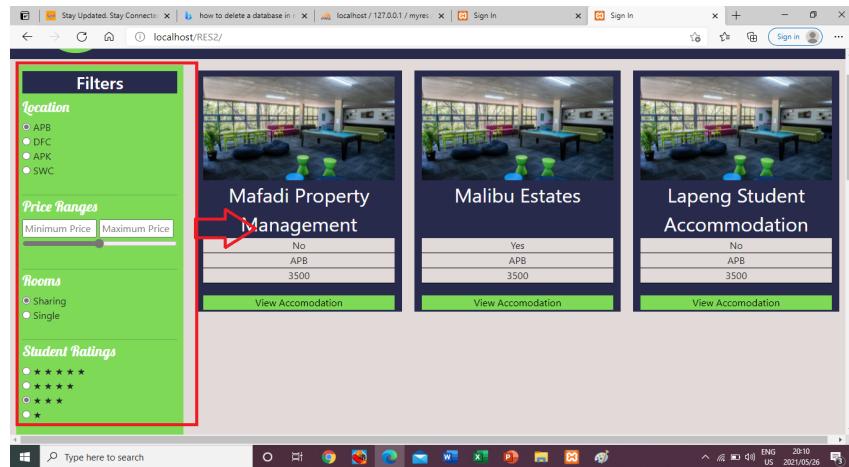
- Location:** APB, DFC, APK, SWC
- Price Ranges:** Minimum Price, Maximum Price
- Rooms:** Sharing, Single
- Student Ratings:** ★★★★☆

Accommodation Listings:

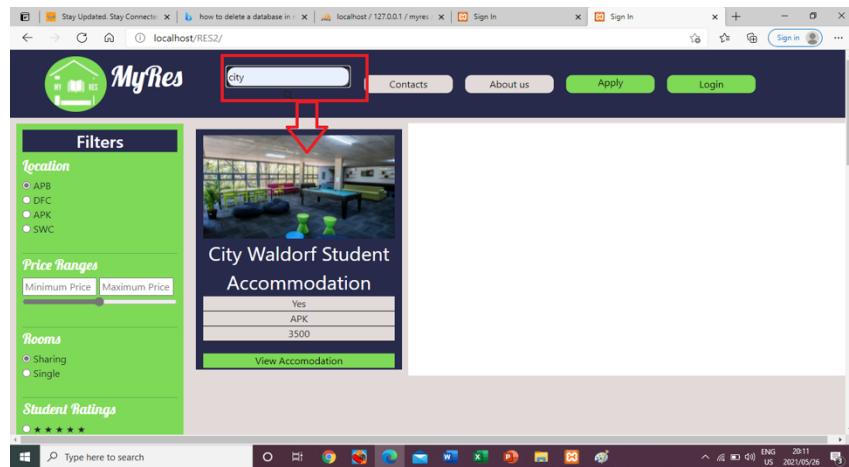
- Citiq Students:** Yes, APK, 3500. [View Accommodation](#)
- City Waldorf Student Accommodation:** Yes, APK, 3500. [View Accommodation](#)
- Hlala Kamnandi Properties:** No, APK, 3500. [View Accommodation](#)

MyRes website

Filters, this is to give ranges and specifications of what it is that students are looking for, from pricing, to campus, to room specification (sharing or not) and so forth.



Search function. This is where the student could search for a student accommodation that they may have heard of before.



MyRes website

Contact button, after the user has clicked on the contact the web page will take the user straight to the footer of the page, where there's links to all the places (social media accounts, telephone number) where the user can get our information.

The top screenshot shows the MyRes website's main search interface. On the left, there are filters for Location (APB, DFC, APK, SWC), Price Ranges (Minimum Price, Maximum Price), Rooms (Sharing, Single), and Student Ratings. The main area displays three accommodation listings:

- Citiq Students: Yes, APK, 3500. View Accommodation
- City Waldorf Student Accommodation: Yes, APK, 3500. View Accommodation
- Hlala Kammandi Properties: No, APK, 3500. View Accommodation

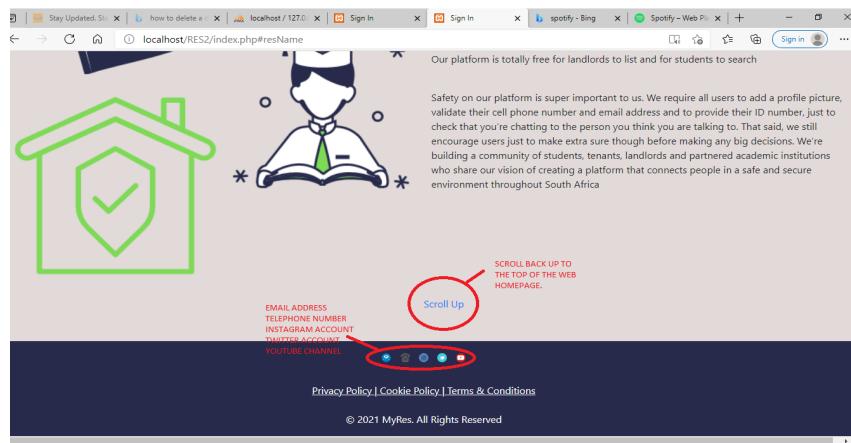
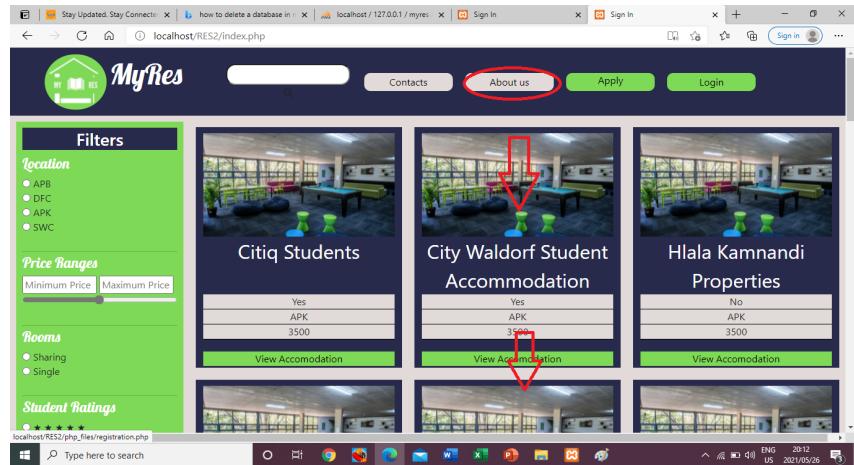
A red arrow points from the 'Contacts' button at the top right of the header to the bottom screenshot. Red arrows also point from the 'View Accommodation' buttons in the middle of the listings to the footer section.

The bottom screenshot shows the footer section of the MyRes website. It features a large green house icon with a checkmark. To its right is a cartoon illustration of a student reading a book. Below the illustration is a safety message:
Our platform is totally free for landlords to list and for students to search
Safety on our platform is super important to us. We require all users to add a profile picture, validate their cell phone number and email address and to provide their ID number. Just to check that you're chatting to the person you think you are talking to. That said, we still encourage users just to make extra sure though before making any big decisions. We're building a community of students, tenants, landlords and partnered academic institutions who share our vision of creating a platform that connects people in a safe and secure environment throughout South Africa

At the bottom, there are social media icons (Facebook, Twitter, LinkedIn, YouTube, Instagram, Pinterest) enclosed in a red circle. Below them are links to Privacy Policy, Cookie Policy, and Terms & Conditions. The footer also includes a copyright notice: © 2021 MyRes. All Rights Reserved.

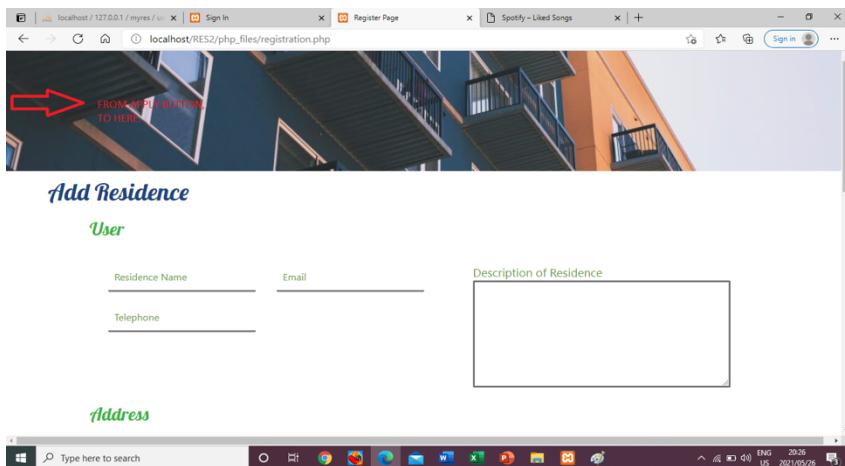
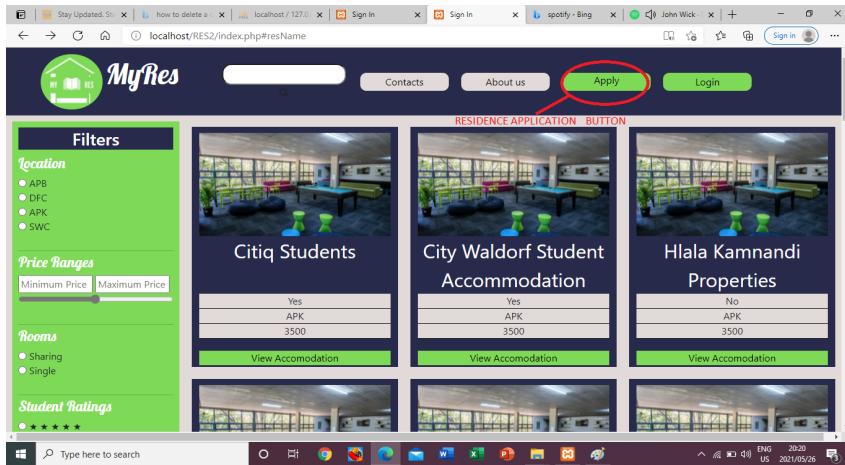
MyRes website

This is a an **About us button** as soon as the user clicks on the button the page will automatically take the user to the bottom of the page where the information about us (the teammates who have created the website) and short explain of the reason and use of the website.

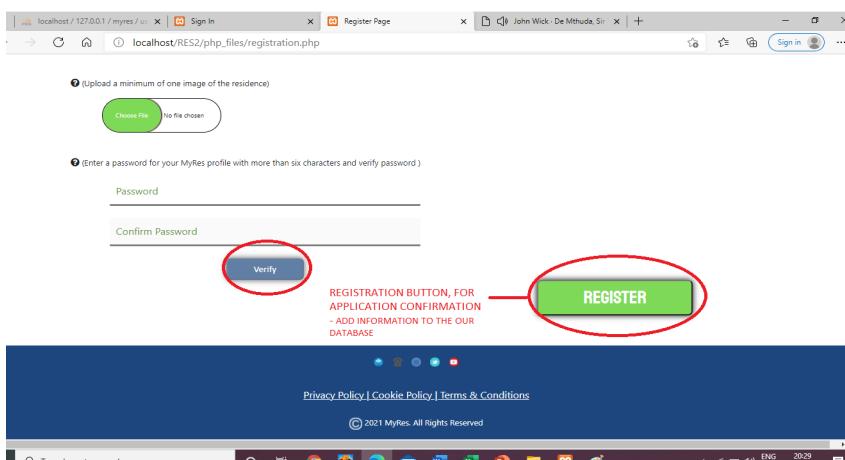


MyRes website

Apply button, this will take the user being the accommodation manager to the application /registration page, where they will apply to put up their accommodation on our website. The application/registration page is where they will add all the necessary information.



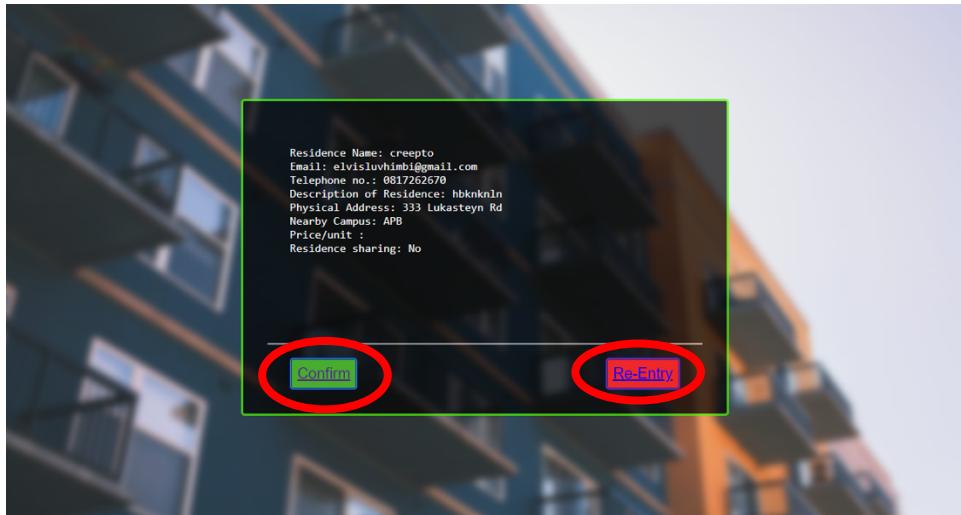
The **verify button** is for the user to check if the accommodation passwords created matches before registering.



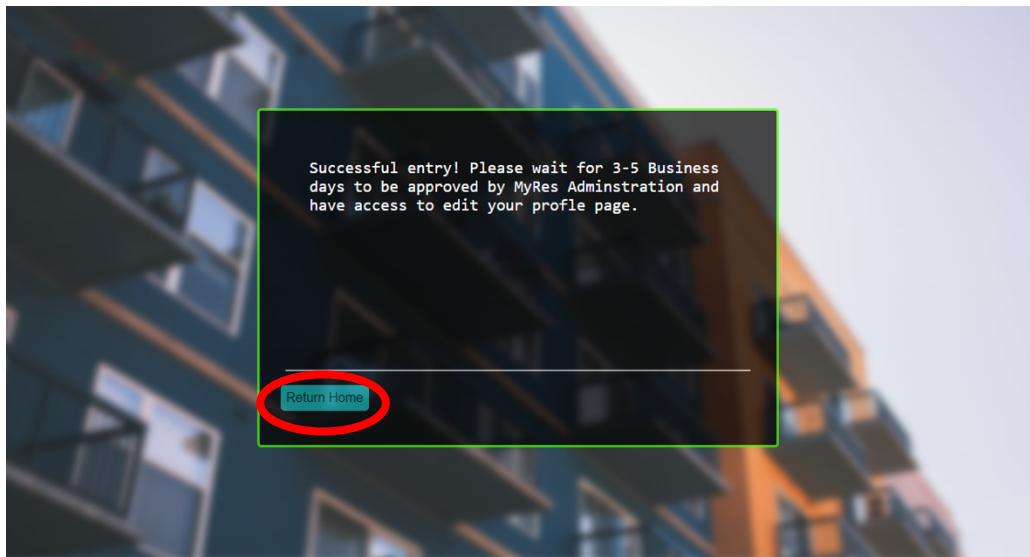
MyRes website

The **confirm button** is for the user to confirm the details inserted in the registration page before it is inserted into the database.

The **re-entry button** is for the user to re-enter details in the registration page.

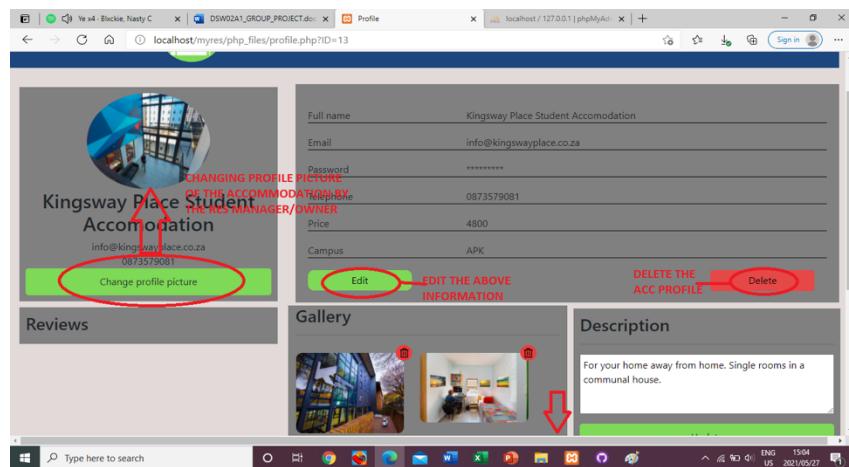
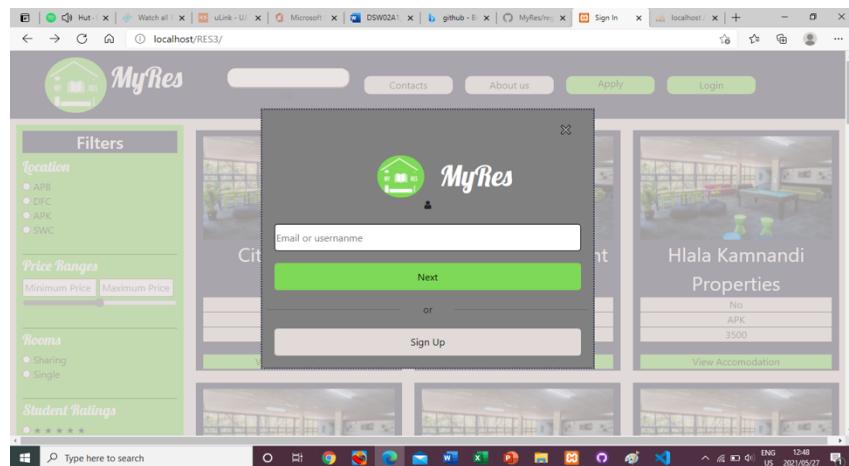
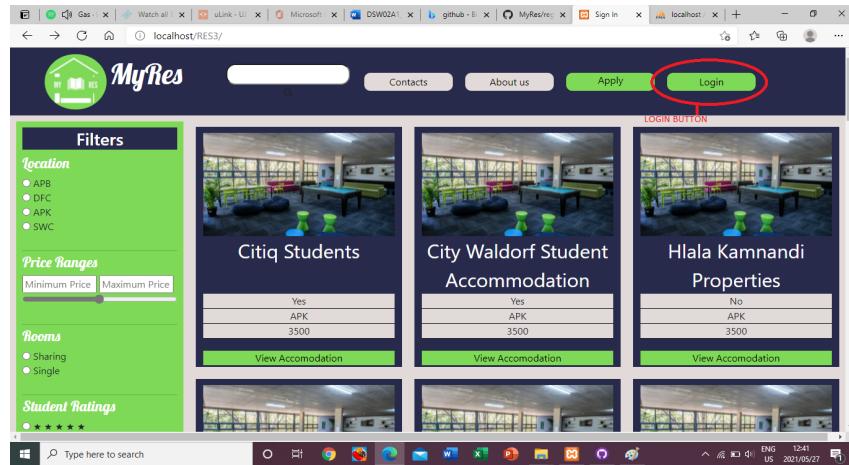


The **return home button** is for the user to return back to the homepage once data is successfully sent to the administrator.

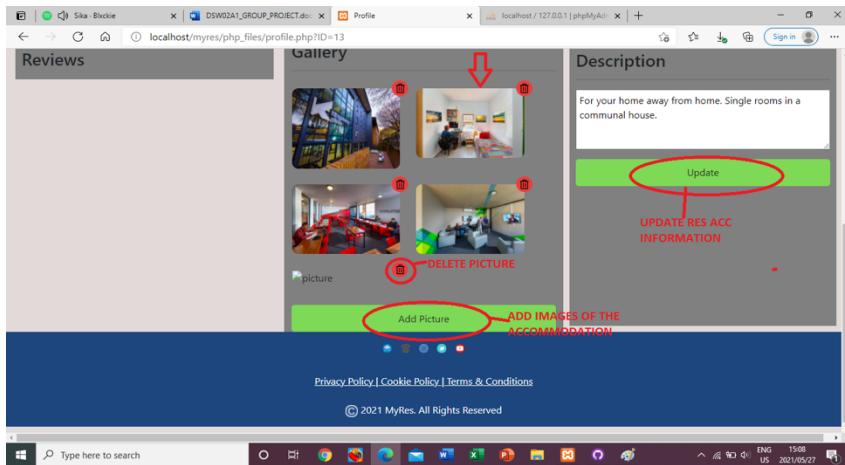


MyRes website

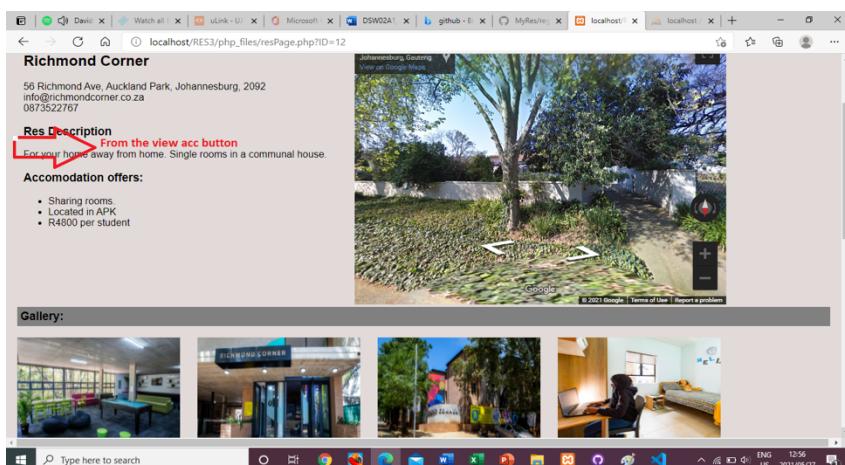
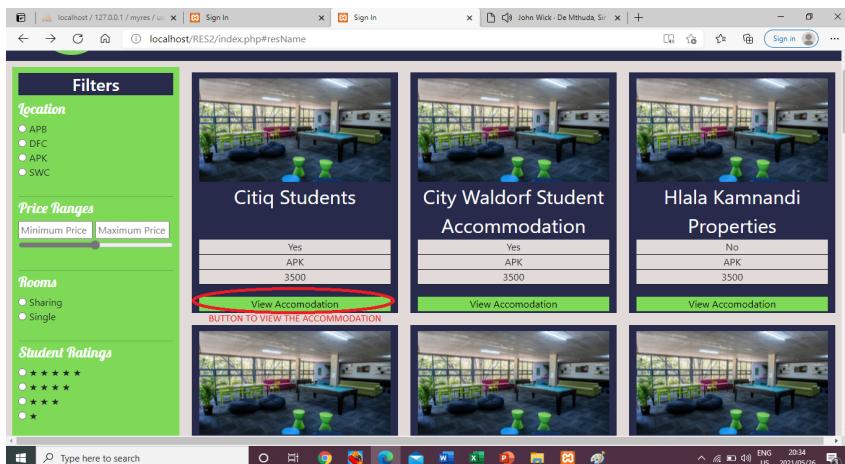
Login button, this takes the accommodation managers who have already applied, registered, and have been verified to log into their profiles to either change their information, delete and update. This is where CRUD has been implemented mostly.



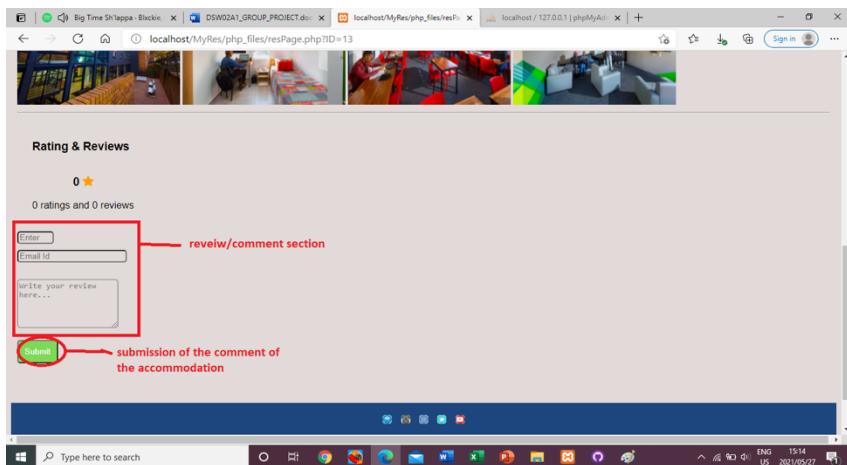
MyRes website



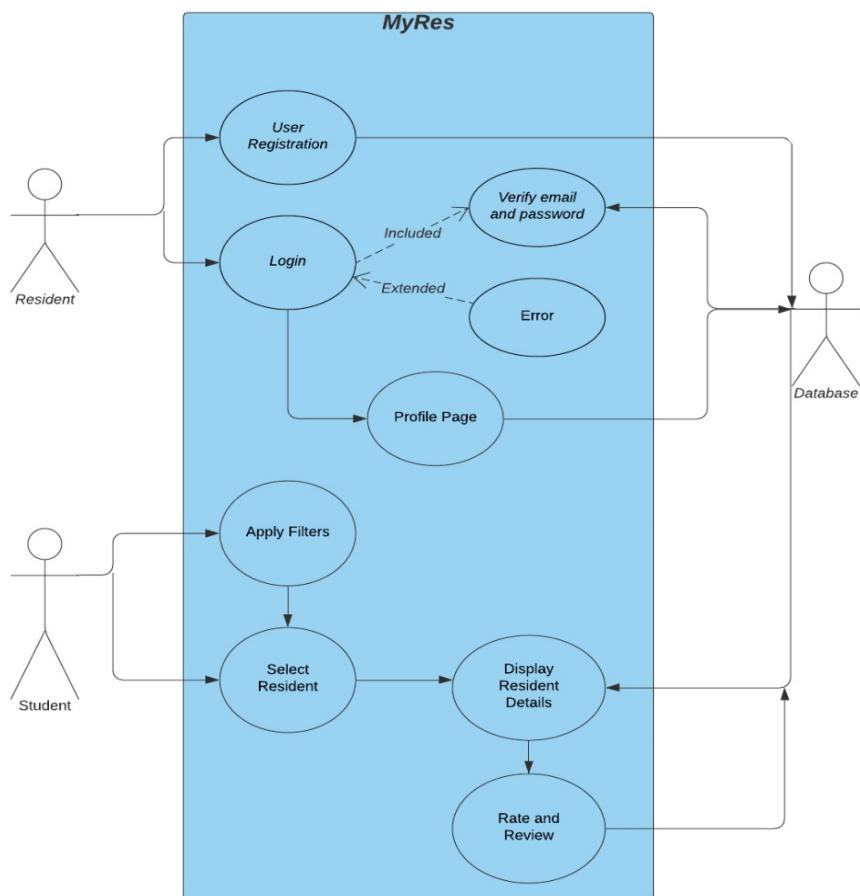
The **view accommodation** button will take the user to the page where all the information about the student residence accommodation is. The accommodation page also allows users to comment and review the accommodations based on the images and their experiences.



MyRes website



Screen flow, Use case diagram.



BIBLIOGRAPHY/REFERENCES

REFERENCES FOR IMAGES USED FOR THE RESIDENCES.

1. Kingsway Place. (2017). Kingsway place. Available from: <https://kingswayplace.co.za> (Accessed: 16 April 2021)
2. CGES Group Ecosystem Services. (). Citiq students. Available from: <https://cjstudents.co.za> (Accessed: 22 April 2021)
3. jWix. (). City waldorf. Available from: <https://www.citywaldorf.com> (Accessed: 11 May 2021)
4. Kamnandi.com (2019). Hlala Kamnandi Developments. Available from: <https://www.kamnandi.com/rental-properties> (Accessed: 11 May 2021)
5. Urban Circle. (2019). Urban Circle Student Lifestyle. Available from: <https://www.urbancircle.com> (Accessed: 11 May 2021)
6. Webgap. (2010). Respublica Student Living. Available from: <https://respublica.co.za> (Accessed: 11 May 2021)
7. BornFree. (2020). Born free students. Available from: <https://bornfreerentals.co.za> (Accessed: 30 April 2021)
8. Richmond Central. (2018). The Richmond. Available from: <https://www.richmondcentral.co.za> (Accessed: 27 May 2021)
9. Design room. (2021). Richmond Corner. Available from: <https://richmondcorner.co.za> (Accessed: 27 May 2021)
10. J one. (2021). J One. Available from: <https://j-one.co.za/contact-us> (Accessed: 19 May 2021)