

## CA357 Group-21 Assignment 2 Report

### Login - Stephen Stephanov:

This particular component of the website was developed to work in accordance to the requirements of which the entire test project is based on. In the survey, it was apparent that many users were frustrated with the login in 365 online banking's webpage. It was slow and hard to use due to it's small and intimidating design. Almost all points in the requirements stage for user accessibility were catered for and prototyped. The only gimmick that came across was the login not rendering correctly on the phone as it would on the desktop browsers. First of all, the main issue to address was to not to replicate a cluttered environment where enough space is given to the user on that one dedicated action which is of course to login into their bank account. For this project however, a pseudo account has been hardcoded for the user and it logs into the banks dashboard regardless of the online identification number and personal access codes. This is just to show an example of the simplicity of the working site. Only a *navbar*, four input fields and a login button exist on the page to avoid the appearance of a constraint and narrow environment.

On the main page, there is a direct link located to the login page on the center and top-right hand side of the of the screen, both of which are one of the most obvious places to start searching for a login. Second of all, the legibility of the page is addressed. The smaller font which was on the 365 banking website does not show on the new login page made for the project. All sorts of details was taken into consideration. The font is made big enough to stand out and make it easier to read, the colour of the font is made to contrast against the background of the page, a few placeholders for the input field exist to cater for potential misunderstandings of users which is all visually encapsulated inside a grey box to clearly demonstrate what is needed without textually explaining the user.

Last of all issues, the main point to address was the steps needed to get the user across the site to get access to in the minimal amount of clicks or button presses as possible. Our requirement was to create an optimal distance of webpages for the user in a reasonable form. It wasn't appropriate to put the login as the first page to come across when first visiting the website as it becomes a major deterrent for users who wish to seek information without wanting the need to log-in. Therefore, a homepage has been created accordingly which would then link to the log-in page, which would then finally in turn link to the user dashboard where they may complete whatever actions they wish.

Evaluation was covered by asking the current group project members to use the various components on the site, being the login for this section. Since work was split into different parts for each team member, concise direction, information and suggestions were able to be given to make it easier for outside testers to use. The outside testers included other project teams and relatives. The overall feedback was mostly positive and in the cases that it wasn't, changes were made. This includes the information not being clear enough in the log-in screen so placeholders were put in place to counter this obstacle.

Not many things needed to be fixed but better implementations could have been made. The project was designed around having a dummy-like homepage which would incorporate a link to the login page. To keep the project as manageable as possible, restrictions had to be put in place so that the site functions as it normally would professionally. There is one static user on the dashboard, input information is restricted like it normally would be like the eight digit online registration number and finally the three one digit personal access codes. Anyone is capable of logging on as the same user as a dummy account.

Had we more experience with tools such as databases and encryption, improvements like storing more dummy accounts in a databases, user login sessions and cookies which all help improve the overall general experience. One other issue is how the login page renders on phones. Every other page displays more compactfully on the smaller screen but due to the requirements on small screens, less ways have not been made for this more specialised component of the website. As an improvement, a stricter guideline would be created for all input fields on the website so that they match all possible test cases for browsers and devices alike.

### **User Dashboard and Statement - Santiago de Arribas de Renedo:**

This aspect of the site consisted of creating a user dashboard where the user could check the main elements of their banking service that they'd be interested in. These include the *My Account*, *My Statements*, and *My Transactions* pages. My Account consists of the users profile, which is not implemented in the site, My Statements consists of a table displaying the users current and completed statements, and My Transactions deal with the users transactions and sending money.

The main requirements that were gathered in the first aspect of this project told us that users had issues with the Bank of Ireland website design, stating that the UI wasn't up to date with current web standards. Looking at the website, we can see that the font is small and the site is not very responsive to different window sizes. The main page is also cluttered with various banking services which make it difficult to navigate. The *logout* button is also small and difficult to see. As such, the redesign of the site incorporated a cleaner and easier to see layout. There are icons for each aspect of banking that the user would be interested in, the font is in high contrast. The buttons also have an underline effect so that the user clearly knows that they have selected them and that they are ready to click. The logout button is much larger and clearly visible. The site is also responsive and elements stay as visible despite a change in window size. A screen reader works with the site for visually impaired users where they can use the tab key to navigate and appropriate alt tags are used for each icon and the logo. The site uses a grey and blue colour scheme to accommodate for colour blind users.

Another requirement that was focused on was creating a system which allowed the user to logically and easily traverse pages that were linked together. Since the dashboard is the main homepage for the user once they are logged in, it is linked to every other online banking service page. This means that these pages have to be obviously navigable and easy to access. This was achieved by having evident buttons linking to these pages.

The My Statements page was redesigned to make it clearer to see and also responsive, which the current Statements table on the Bank Of Ireland site is not. The redesigned table uses up more space on the screen and the code written in the html incorporates a scope tag which tells a screen reader that the user is either reading a specific column or row. The requirements that the statements page was based on meant that the table had to have transactions where the user could find a purchase for a specific date, in this case the 21st of December 2018 was chosen with 10 transactions listed: 5 current and 5 completed.

The prototype was evaluated by sending the site to different users from other groups and recording their feedback for modification. Main feedback was positive with praise going for the easy to view layout and ease of use. Critiques were centred around the footer being difficult to read due to

the small font but overall the font on the main page was very legible. The My Statements table was also praised for its easy to read layout and responsiveness. The feedback came from various groups in the module as well as family members and friends.

One aspect of the site that would be interesting to focus on for the future would be to use a different colour scheme. Grey, white and black may be uninteresting for users and doesn't motivate engagement. More engaging colours would be orange or green but these would have to be used with clear markings to accommodate for colour blind or visually impaired users.

Overall, the pages are designed to be more user friendly with more legible text and easy to navigate. No databases are being used to store any user data so the statement page for example is hardcoded to mainly focus on the user experience. Our website is mostly compliant with the requirements created when assessing our survey data and resulting feedback from the finished end product from users is quite positive. This feedback centering around the design and usability of the site fulfills the initial requirements for the project.

### **Transactions - Vilandas Sukutis:**

The main issues surrounding the transactional area of Bank Of Ireland's website was the hassle that a user would have to go through to transfer money from their current account to another person's. Based on the information received from a survey we created, this process is annoying and for some even confusing.

A user would have to first find the Add a Payee page by exploring the website until its found as the overall design of the current Bank Of Ireland's website is in our opinion, a cluttered mess. Once the Add a Payee page is found, the user would have a limited amount of time to fill the information in, double check and submit it. If the pressure of being forced to rush through the process weren't enough, you would need to verify this addition by phone or physical letter.

The sending a payment process then is not so bad as you simply select from a list of previously added Payee's and select an amount to send. This is all good, but the current website does not allow for sending payments to anybody who is not on your list of approved Payees.

Besides the functional issues, the design of the website is also bland and cluttered, with links thrown all over the place, grouped into small corners and with no effort made to distinguish categories. All of these design issues alongside the functional ones were addressed to make the process of adding an optional Payee and sending a payment easier and quicker than ever.

The Add a Payee page is now easily accessible from the navigation bar, placed right beside the Send Payment button. Inside the actual page, you are presented with a large but simple form with very few instructions. A description is given to those who are unfamiliar with what a Payee is, and what use you may have for adding one to your list of Payees. Afterwards, you are asked to input any name you wish you call your new Payee, their IBAN and BIC. To help prevent errors, the IBAN input field is restricted to the maximum length of 22 (standard) and BIC to 11 (standard). Once all the information is entered, the user pressed the large blue button add the bottom called Add Payee and they are all done.

The Send Payment page hosts a list of your currently existing Payees that you have added, in addition to a form in which you can either enter in the name, IBAN and BIC numbers manually or, by just selecting the desired Payee from the formerly mentioned list, the information will autofill, while still allowing changes in case you wish to make changes. Finally, in the amount field you enter in the payment amount that you wish to make and can then go ahead and press the send payment button. Design wise, we stuck to what we had planned in our requirements report, by increasing visual contrast using colours and enlarging the forms and general text. There is a lot of screen real-estate to work with and it shouldn't go unused. The different features are clear, and pressing on the wrong button is difficult.

This portion of the website was tested by asking members from various other groups participating in this project to have a hands-on experience with the website. We went out of our way to gather participants who are currently or have ever used Bank Of Ireland's online banking service. The results were promising, with the majority of the participants exclaiming their satisfaction with the website. Common compliments paid were to the design on how simple and clean it is, in addition to being able to find what they were looking for quickly.

One user mentioned that the first time they used an online banking service, they were not sure exactly what an IBAN or BIC was and would have been happy to see some more information. We took this feedback and added a Need Help button. Once clicked, a box would appear explain what the different input fields in the Add a Payee page were about, giving all the details about IBANS and BICS.

While most participants were happy with addition of the feature allowing you to send payments to others without them being in your Payee list, one user however was concerned that not being restricted to a pre approved list would lead to easier money theft. We came up with the idea of allowing a user to choose whether or not to allow making payments to people who are not in your approved list. This toggle would become available after you confirm your identity by receiving a code to your phone which would be needed to be entered onto the website. The toggle option would be blocked after a few minutes and you would need to reconfirm your identity if you wanted to change the setting again in the future. However, we did not have enough time or resources to implement this.

Overall, the transactional page overhaul was a success, with the majority of the participants tested giving positive feedback, with the only major criticism received having been security concerns, for which we also provided a possible solution to.

### **Homepage and Template Code - Pedro Canes:**

This aspect of the website consisted of creating a solid and clean homepage. The first point we wanted to achieve in the creation of the homepage was to make sure the visitors knew exactly what to do with a clear and easy to find value proposition. We wanted the user to know where to go as soon as they clicked on the web page. The second point we wanted to hit was to have an intuitive comprehensive navigation. The website navigation had to be easy to understand for every user,

especially first time visitors. We want the user to arrive on the website and know exactly where they can find the information they are looking for without being confused and/or overwhelmed. The first thing the user will see once they arrive on the website is the big Log-In button. Logging In is the most important feature on the website and we wanted to make sure that the user did not have to spend lots of time looking for it. Below the Login button, the home page also has a few points of information that may help the user to access their account much more easily. Finally, on the bottom of the homepage, the user will be able to find the company's address and contact information in case they require help. If the user needs, they will be able to access the phone number as well as the company's social media networks.

Regarding the website's template code, as mentioned in the requirements report, we wanted to make sure the website had a logical and easy navigation throughout the website i.e. we wanted every user to be able to easily access every page without any issues. The website also had to be consistent all around, both colour-wise and design-wise, that way, it would be much less confusing. Clarity was also one of the main attention focuses we took into consideration. We thought that the clearer and easily understandable the website was the better, otherwise users could be overwhelmed. We wanted to make the obvious very obvious. Functionality was also taken into consideration, especially because banking and financing websites tend to be very complex, therefore we decided to only highlight the most important links, that way broken links or broken functions would be much easier to find and easier to fix.

Accessibility was also a factor that we made sure to prioritise. We want every user to be able to easily browse through the website. When building the template, we tried to make sure every link is accessible by Tab navigation and that the colours are simple and contrasting, that way colourblind people will still be able to differentiate colours. The website is also easily accessible from mobile devices. If the screen size is small, the navigation tab will change into an icon that expands when clicked, that way even the smaller devices will be able to access the website.