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Group Name: Group X

Product/Application Name: TheReadables

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CONTENTS

INTRODUCTION

A proposed design of an application with an interface representative of a library, where the primary purpose of the application is to ensure that users have the ability to access stored information on a database. And this is achieved once their created membership account has been read by the verification elements of the application, effectively granting the user an updated access to their selected storage of information, with such updated access to the database content deleted upon the termination of a predefined time-limit. Where, the facilitated retrieval of stored information by the user originates from a created collection of predefined media format files on the database, that have modifiable categoric attributes, such as: format, genre, or author. And such media files, other than limited sample segments, are not available to users without the correct updated access granted through membership, as can the media files and user accounts be entirely removed from the database.

AN OVERVIEW OF OUR APPLICATION IDEA AND DESIGN.

The design of the academic library website is for the diversity of users and information that would exist in the university environment. The library website will have an interface which will accommodate the various requirements, scholarly disciplines, and abilities of the numerous users within the institution. The primary users of the academic library within the organisation are not the academic staff, but also the library, general staff, and students. However, the secondary users will come from other academic institutions both nationally and globally. Conflict could arise between the individual library staff and library sections as the purpose of the library website.

The most important designs decision we are going to make as group, is determining what content should be displayed in the homepage. On our homepage it will have links that will connect all other site pages, and text identification of the graphics used on each page. It will also include clear navigation, simplistic scan-ability, and functional consistency. Our homepage should attract appropriate and potential visitors. The main focus will be addressing the target audience in the easiest way of an understanding level. Our homepage will never be static, it will continuously change, adapt and be reflective of both our visitor's feedback and company contribution. In the homepage, we will embrace simplicity, removing unnecessary distractions and focusing on design that gives guidelines and relevancies to interest.

In our homepage it will communicate with users within one glance, as its going to provide them the information about what our application, 'TheReadables', does. The users can find out the purpose of this site, as our homepage will communicate well, by having the appropriate emphasis to both branding and high priority tasks. Due to our homepage having links, an example of this is when a user picks the book they desire to read, they click on the book and the link will take them to a page where they have access to the book. Our links is going to be specific and brief as possible. It won't have generic instructions like 'click here to read this book' instead there will be meaningful text in the links name to tell users what they will get when they click. This will assist the users to rapidly differentiate between links when they are scanning through them. Another feature with the links, it allows links colours when the user visited them or unvisited states. For example, if the user comes' back to library, it will give them a remainder that they clicked on that book previously.

Another feature of our homepage is the facility to navigate elsewhere on the site, it is essential that users are able to find the appropriate navigation area effortlessly, have different choices and also know what lies beneath the links. The navigation area in our application will reveal the most important content of the site so that the users have a good sense of what they are looking for from top-level categories. The design we are aiming for: is to locate the primary navigation area in a highly visible place, with preferable immediate adjacency to the main body of the page.

The most important element of the homepage is the search bar, and its critical for user to find it easily and use it effortlessly. The search bar in 'TheReadables' is straightforward: make it visible, make it wide, and keep it simple as possible. Search bar gives the users an input box on the homepage so that they can enter search queries.

The design process which we are going to focus on is user-centric design (UCD). In order to develop our academic library website, we are focusing on the user and their needs in each phase of the design process. Involvement of the users throughout the design gives such better design techniques, high usable and accessible products for them. This design process is use of investigative methods and tools, which include: surveys and interviews, and generative ones, such as: brainstorming, to develop an understanding of what are the requirement of the user.

In the UCD approach, it involves four phases. First, it involves us working in a team, and trying to understand the context in which users may want to use our system. As a team, we want to build a library website application.

The second phase of the process includes identifying and specify the user's requirement. The user's want a library website because as we are currently in lockdown all the libraries are closed. As a team we have come forward with creating a library website, where the customer will have membership with us which will grant them access to selected materials. Creating a membership is a replica of how the user will create a library card, in order to have access to the library: we used the same model. Another concept we have copied of how library operating is the non-monetary transaction and time limit on access material. For the user to have access to our materials we want them to create a membership with us – this is one of key models that we want design. The reason why the membership is crucial to our application is firstly, the user can have access to the service we are giving. As a company, we will use this information to provide us information about the user. We can start to think about how we can attract new members and how we can retain the current members to keep them using our services. Overall, this will improve the customer service aspect of the business.

Once the user first creates a membership, free of charge, the user has the access to the material we provide. As the user chooses the material that they want to read, we will give them a time limit to read the material. The material we provide will come in pdfs and audio file database query because having the user read the material on pdfs will prevent further distribution. The next phase of the users centred design is the design phase. This is followed by the evaluation phase. In this phase we are going to access the outcomes of the evaluation against the user's context and requirements, this will check how well our design is performing more specifically we will see how close it is to the level that matches the user specific context and satisfies all the relevant needs.

Business Questions Covered In Our System

How do we fulfil the needs of a population that encompass a variegated distribution of interest types and education requirements?

Our product application, TheReadables, aim is to distribute a multitude of content that supports a variety of knowledge bases and interest groups. This is achieved through the provision of fictional content that will satisfy the recreational appetites of users, as well as, non-fictional educative content that can be used to build both users intellectual and particular topic skillsets. Through the provision of both categoric content types, ensures our application's appeal to a wider audience.

How do we contribute to the raising of our audiences skill level, therefore, contribute to the development of an engaged proportionate of the population?

Our application assists the development of its audience through enabling access to content which: supports creative, imaginative development; provides classic works, instructive works, and records of important information that equally form foundations in education and civilisation; as well as, improves the literacy and overall knowledge base of the users reached in an organised manner.

Through what ways are we supporting the outliers of a total population in terms of endorsing increased accessibility?

By offering audible versions of recorded reading material, the content, consisting of recreational and educative orientations, is consequently made available to individuals of the population that may suffer from visual impairments or learning difficulties, of whom may find audio files more effective in their learning and usage. Whilst also utilising visual screen features that can be altered to aid visual reading, such as: font size, captions, or colour patterns for dyslexia. Paired with the ready availability of the content that comes from the distributive elements of TheReadables, may also help them overcome the difficulties associated with the efforts in obtaining physical books, such as: brail, from traditional shops. Furthermore, due to the similarities of our application to that of a library, content is both readily available and free-of-cost to users who become members, effectively making content more accessible to populations of a lower socio-economic backgrounds as well. In addition, whereby both audio and word formats are provided, an opportunity is created to fulfil the preference of different learning styles, which is an element favourable across the entire population.

Where and in what areas can 'TheReadables' application be integrated into users everyday life?

The easily accessible mode that is found with audible book material can be utilised by users to suit their daily activities and individual preferences, albeit during travelling, fitness, gaming, work, et cetera. Additionally, the provision of digital reading material suggests a copious collection of works already selected by the granted user can be accessed at any time and from any location, fitting their unique situations.

In terms of business development, what elements and features of 'TheReadables' could be viable for generating revenue or (non-profit) funding for the project?

To gain access to the recorded material stored on 'TheReadables', the user must subscribe to become a member. This then enables the user, now member, to select and rent the provided content of their choosing. Therefore, first of all, the subscription model to become a member could be monetised before allowing admission and access. Or, secondly, the member, who may have become a member freely, has to pay a rental fee for each chosen content, giving them access to the material for a certain amount of time, which may lead to our application enabling purchasing downloads and therefore ownership. However, to maintain the characteristics of our application that are similar to that of a library, with the advantages they bring to society via free sources of knowledge and literacy, this may be a desirable element for 'TheReadables' to keep. So, monetizing featured content or charging content-creators like authors to feature on 'TheReadables', could be revenue generating opportunities that would not disrupt the intended accessibility of our application by remaining free-to-use overall.

How does 'TheReadables' work with and benefit content creators, such as: authors and technical writers?

'TheReadables' provides content-creators with another platform to showcase their work and have their efforts reach an audience already catered to by our application. This ensures content-creators an element of business security in terms of adapting their work to a digital environment. Additionally, the integration with an online platform, which distributes both written and audio formats, may offer content creators the opportunity to develop new types of content.

How can we ensure, maintain and deliver our application in an Agile environment?

Dealing with Rigidity:

The rigidity of the application infrastructure dictates our ability to adapt to any future business eventualities, such as: changes in user behaviours, updates in media formats, creating members, the overall set up and representation, or deleting author materials, etc.

- How flexible and easily can the application be updated?
- What areas of the code are expected or known already to be resistant to change?
- Where do we expect future developments to occur and how have we planned for it?

Dealing with Fragility:

The fragility of the application infrastructure indicates vulnerabilities that could manifest in response to changes in the code or unexpected user usage, which may result in unexpected occurrences, proving maladaptive to the users experience.

- Where do we expect high traffic and heavy usage to occur in the application?
- How do we plan for users behaviour and how do we want the application to respond?
- What are the different dependencies present between the architectural elements and their functional debility relative to changes made elsewhere in the code?

THE PURPOSE OF THE APPLICATION

The purpose of academic library website we are creating, is so that there is a gateway to further resources on a range of subject areas. Another purpose is using our web as a communication tool. The design of the web pages for the primary users and secondary users will differ as there are different interface elements.

Another purpose of this application is to give users the knowledge they need to be functional adults in their day-to-day lives. Our library will play a fundamental role in society, as the resources and services we are going to offer will create opportunities for learning, supporting literacy and education. Having a variety of educational books in our website, offers learning prospects that will fuel economic, social, and cultural development. The distinct feature we are introducing is offering audio files of selected books that a user has chosen for listening. With this feature on our website, we are focusing on the users with special needs, we want them to feel a part of the education we are providing, and we are showing that they are not left alone as well.

As social institutions, library became an integral part of society. A library is exclusively interlinked within society's mutual use for knowledge. Everyone realises that having information plays a substantial part in human development, as it enables people to develop into their full potential with the correct education, skills and it prepares them for future work. A library provides the basic requirements for independent decision making, cultural development, and lifelong learning opportunities. Libraries are the gateway to knowledge and culture as it gives countless learning opportunities which can fuel economic, social and cultural development.

Who needs libraries: all the sectors which include economy, education, research, or even the service-sector. The reason why all these sectors need a library is because information is available to them, whether it is for cultural, social and economic development. Our reason to creating this application for the users is for the education institutions. The education institutions absolutely require the needs of a library as it supports literacy, shaping new ideas and perspectives that are the centre for creativity and innovative society.

Citizens need libraries because it will keep them informed about the changes of democratic right in societal development. With 'TheReadables', users will be aware of the changes that are taking place within the society. Also the user coming to website, will have rich repositories of historically and culturally significant collections which will be available to the user as we are preserving the records of knowledge created and accumulated by present and past generations.

Important Links

GitHub: https://github.com/aniqa-byte/Group-X

Trello taskboard: Tasks | Trello