REGION BASED MESSAGING

Project Research Document

Abstract
[Draw your reader in with an engaging abstract. It is typically a short summary of the document.
When you're ready to add your content, just click here and start typing.]

X00160711 Cianan Nicolai
X00160711@mytudublin.ie

Contents

Introduction

The research document should provide detailed information on the project, its scope and aims, prospective users, and possible technologies that will be used for implementation. You should carefully evaluate APIs, data sources, key libraries, or other resources you need that are critical to the project success. More specifically the research document should provide information on the following

Section 1: Detailed Discussion x 1 Page

Take the idea you have selected and develop it providing a detailed discussion on the system functionality and what you propose it should do. Who are the users?

The Idea!

The idea that I have chosen is a short-ranged messaging app, instead of being based on globally produced content it is based on locally produced content. Focusing on giving content to smaller communities in for example Dublin.

The posts will have a range limit however there will be post groupings based on geographic regions / cities that users can tap in, and businesses can post event information to. For example, the fictional Pub McCools could post their 2010's subculture night, users would see this post in a what is on tonight section, scrolling down would reveal events on further tonight.

Other than range base posting, event posting, users could create group postings where their collective circles posts show up.

If I was to compare this feature of event posting to another social media type platform, it would be Instagram. Instagram is incredibly popular with businesses as it includes features like stores and discoverability, but the problem is you follow these businesses like would any other person, if you say follow like at least 200 users/businesses/celebrities there is no distinction between them.

Ideally if you looking for something to do on your Saturday and you do not have a place in mind you don't really have an easy way of seeing what is going on that Friday night? You missed the announcement for the Disco Night at McCools in a sea of posts and you do not check their page regularly, how would you find it.

System Functionality

The main functionality is centred around is essentially a social media application and being as such that I do not have an existing user base much of the content will have to be simulated. The groups, messaging and all sorts of minor features will not and do not exist until I create them.

Who are the users?

The users in my mind are young people looking for online communities with similar interests to them in within the area to them, ideally, we what these young people to be in the age demographic of say college students instead of tweens and teenagers. Similar applications in design, Yik-Yak became the centre of a lot of controversy, (Simonetti, 2021).

It is virtually impossible to keep under 18's off apps they aren't meant to be on but in order to avoid the bullying that was commonplace on Yik-Yak I think obscuring the range a post was sent from and the general wide operation range would mean that in the hypothetical ethics of this online platform and user experience it would turn out better.

Section 2: Existing Applications in this domain x 1/2 Page

In your research have you found anything close to this idea? List these in table form and identify similarities and differences

Application Name	Similarities	Differences
Yik-Yak	Yik-Yak was my main inspiration originally, so on face value view there's a lot features that they'll share.	Yik-Yik was focused on regional posting, but I believe strayed away from this upon realising that global content went more viral. I want to focus on regional content.
Twitter	Twitter's algorithm recommends local content but also global content. There is various sub-cultures within this local content such as 'Irish-Twitter' and 'Emo-Twitter'. I think these micro communities produce content they themselves want to consume.	I will try to focus on these smaller communities. Twitter has a group function that has recently been introduced that I want to attempt to make one of the main focuses of this app. The idea of being fed post from groups of people that you want to see. There will be a focus on local events in the real world instead of news based one.
Whisper	Whisper is an anonymous messaging app that spawned out of the same idea as Yik-Yak.	Users will have usernames and while anonymity is nice, assigning a name and face to a user helps build community. Websites /Applications like these also come under fire for facilitating predatory behaviour (Casey, 2018).
Instagram	Instagram is perhaps the most popular social media app out there right now. Sharing the same possible demographic as my own site. I don't think it's possible to have a website that doesn't have a little Instagram DNA as Instagram itself cannibalizes ideas from so many other sites. I think it's willingness to do so however is what makes it incredibly relevant. (Mara, 2017)	By it's nature my site will be more similar to Twitter or previous forms of Yik-Yak. Instagram is so focused on remaining popular and staying relevant it is focus has changed significantly from what it previously was. (Milmo, 2022)

When comparing however, I think an import thing to note for myself is that I am not trying to reinvent the wheel as cool as it would be to. Implementing one of these websites catalogue of features would be impressive for an individual. There is massive complexities behind these applications I can only hope to represent in my own application.

Section 3: Platform, Technologies, and Libraries x 1/2 Page

What platform, technologies and libraries are you planning to use?

Platform

Front-end

Python will also be used for my front end though I may end up mixing it some JavaScript. Django uses HTML to display information on pages so I'm hoping that all works out for the best. I'll also make extensive use of **Bootstrap 5** as it comes in with great built in UI and is something that I have previous experience.

Back-end

Python (Django) is what platform I will be using to build my website. It is what I'm most familiar with and while I did use SAPUI5 to build a project website while working there during my internship. I think it will be more beneficial to me to use Django. Django is used by many popular social media sites too (Django, 2014), which I hope means it will suit my use cases too.

I will be using **Node.js** to run my website locally which I will do throughout the development process. I have my own **Digital Ocean** server that I pay for. I'm worried about the security of doing so, instead after doing some searching, I found **Jekyll**. **Jekyll** allows you to use **Github Pages** which means that you can host your site freely on a .io url, this I believe will be my solution to hosting my site should that be a requirement of our project.

I will be using HTML Geolocation to register the user's location which will then determine the range in which their post will show up, again this will be a vague range over a larger geographical location to prevent things like cyberbullying and stalking.

Database

I will be using MySQL, which is a database I have previous experience with and will attempt to implement. As more commonly used database it should prove very easy to problem solve its usage.

While working in SAP I had to create a project with a group and we struggle significantly to implement a working database even when we were allowed to use whatever we were comfortable with.

Libraries

[Mockaroo](#) provide me with some sample users to search through and have create posts, I will need to generate the user's content myself, but I think this is a great start for basic user information.

I've searched for user posts and other user information using **Kaggle** but unfortunately, I was unable to find anything.

Below is an example of the generated user information, while they aren't near real they'll be fine for making a mocking appearance of an online user database.

id	username	first_name	last_name	email	gender	ip_address
1	ssalvage0	Shell	Salvage	ssalvage0@linkedin.com	Male	208.65.151.79
2	rmatveiko1	Roley	Matveiko	rmatveiko1@bizjournals.com	Bigender	217.163.180.17
3	cmoreinu2	Celestyn	Moreinu	cmoreinu2@nbcnews.com	Female	190.231.4.37
4	odonnellan3	Ora	Donnellan	odonnellan3@360.cn	Female	95.145.14.254
5	tcollison4	Tomlin	Collison	tcollison4@zimbio.com	Male	161.179.178.57
6	bpetruska5	Brocky	Petruska	bpetruska5@bbb.org	Male	91.69.5.186
7	bstruthers6	Bartolomeo	Struthers	bstruthers6@rambler.ru	Male	58.82.43.252
8	rreeders7	Rikki	Reeders	rreeders7@toplist.cz	Male	70.165.62.99
9	pzini8	Pace	Zini	pzini8@theguardian.com	Male	175.114.224.228
10	sbrekonridge9	Shea	Brekonridge	sbrekonridge9@boston.com	Male	169.162.55.77

Section 4: The risks x 1 Page

What are the main risks to the project? (i.e., are you depending on 1 library to provide key functionality?

The main risks to this project are time and presentation, if I don't put enough time forward to add functionalities it may appear very empty and slim. I need to sell my social media website by ensure that the full idealized functions are realized.

- Posting, images and videos
- Location tracking for said posts
- Commenting
- Event posting
- Group posting

I think that while it's very easy to list these functions out, the reality is that getting this all functioning by myself will end up being very complex.

I am depending on Django being good enough to provide my functionality however, seeing as a massive social media power like Instagram (Instagram, 2011) uses Django I hope it'll work out.

Weakness wise, I am depending on being able to use all my listed Technologies as I think I'll be most likely to be able to deliver my project on time while using them, if I had to for example switch one out it would mean re-learning and re-doing my entire website with another platform, Django does have some compatibility with other platforms but I would still have to learn how they function.

If we were to put my idea in real world terms, would it succeed? Would it be financially viable? Probably not with a team consisting of one person. The reality is that a lot of social media applications fail (Failory, 2022). Do I think if I was selling this idea to investors would it go big where previous ones didn't? Probably maybe not but I think creating a fake social media application would be a great thought experiment for jamming it various types of functionalities into one application, making them flow together and seeing what breaks.

The constant stream of content theoretically that this site could provide like Twitter however is very popular right now and could perhaps mean that it will in the theoretical world where it's a real platform launching, do very well. The demand for shorter and digestible content is incredibly high right now in the social media sphere.

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