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A community-based fact-checking website

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Abstract

Nowadays users share their beliefs and opinions on anything. These beliefs can be true or false. If false beliefs start to spread as a fake news on mediums like social media, forums, and traditional media. People tend to see things on these platforms and they share it further without doing a background check to see whether this news is factually correct or not. There are existing fact-checking websites which do provide the service of getting the news verified. Often these websites don't address the news which are not of international importance and they have a limitation of diversity through which these websites cannot understand the claim in depth. This project aims to create a platform where the user can share their claims and get it fact-checked with a proper list of evidence and multiple verdicts. The difference between the existing fact-check websites and this project is that the community is the one giving verdicts and list of evidences. So considering these points, this work will be a great tool for the community to use and get their claims fact-checked. The entire project was built according to the requirements that were set up.

Education Use Consent

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Chapter 1

Introduction

The media and in particular television, the press as well as social media, play a key role in informing the public about the ongoings in the world. In cases which audiences do not have direct knowledge of what is happening, they become dependant on the media[1]. Hence, in contemporary times most fake facts are distributed on social media or on new media without being examined upon its truth.

Despite, few people checking the reliability of the source, most users share it without confirmation of factuality [2]. Research indicates that 50 percent of the population learn about the breaking news through social media rather than other news sources[3].

As the United States (US) politician, Daniel Patrick Moynihan said, “Everyone is entitled to his own opinion, but not to his own facts” (2010), Research confirms the existence of misinformation, unverified facts and untruthful claims in present content-marketing and the world of social as the latter platforms are widely used to circulate information all over the globe[4]. This has resulted in the rampant increase of fake-news, hoax-news or pseudo-journalism. These terms describe the nature of information being fabricated where sensationalist stories are created to reach a large audience by using social media algorithms in their own interest.

The faith of people, particularly in democracies such as India, in the mainstream sources of information has been deteriorating over the years. They are no longer considered completely unbiased or accurate in these countries where freedom of press is a cherished liberty[5]. Therefore, a wave of fact-checking sources is imperative to counter the escalation of fake-news.

As the online information infrastructure was sensitive to misinformation, more people conducted individual examination of fact-checking services[6].

Moreover, in politics, fact-checkers attempt to disclose false political claims from the public[7]. Since, fact-checking may immunizes readers against statements of misleading nature[8].

1.1 Problem Statement

“The ability to form accurate beliefs, particularly about issues of great importance, is key to our success as individuals as well as the functioning of our societal institutions”[9]. One of the main

problems in today's society is that that isn't always easy.

It is vital to derive correct conclusions on the basis of informational truth, to being able to follow rationality and sanity[10].

Moreover, the fake information that gets spread around the internet on platforms like social media, forums and various other sources where users interact with such news. So to tackle this problem of fake news and to spread awareness in the community, we need a tool which fact-checks these claims that spread around the whole media.

1.2 Research Objectives

This project will explore the idea of how a community-based approach can decrease the number of fake facts which have been circulating over the internet, the misinformation which gets carried forward in forums, and how a strong community can make the fact-checking platform even better.

1.3 Outline of the Dissertation

Chapter 1 - this chapter talks about the problem, objectives and a brief introduction.

Chapter 2 - This chapter will discuss about the background, requirements, analysis, and features.

Chapter 3 - This chapter will discuss about Design and Implementation of the whole web application.

Chapter 4 - This chapter will discuss about testing and Evaluation.

Chapter 5 - This chapter concludes the study.

Chapter 2

Analysis/Requirements

2.1 Background

Evidence has substantiated that the main purpose and meritorious goal of any fact-checking source is to promote truth in the public discourse [11]. There has been an increase in numbers of online platforms that were created for verification and authentication of the news or story that has been propagated on web.

Such fact-checking websites have a propensity of a news website where the user scrolls down the main page to verify or learn about the latest fact-checks. According to the Duke Reporter's lab census, there has been a substantial growth in the number of fact-check projects as the numbers increased from 64 in 2015 to 96 in 2016 in 36 countries[4]. Another study was conducted by Stanford University where 7804 students participated from middle school through college, and many of the students judged a tweet by seeing how much information it had or how big the picture sized was attached to it[12]. Moreover, in a study conducted by University of Columbia, it was found that 60 percent of the users share the news over social media by just reading the headline and not reading the source or anything beyond[13].

A lot of community-based forums such as Stackverflow, Qoura, and Yahoo answers are very popular these days and a majority of users try to get their claims answered from these forums. However, all the information that gets shared on these forums are not always factual[14]. According to a study by Loughborough University's Online Civic Culture Centre (OCCC), 4 out of 10 people share fake news deliberately, and almost 18.7 percent shared the news purposefully to upset others[15].

The closest to a community based fact check website is consider.it, which is a platform that lets the user create a forum, and allow them to ask their queries through such forum for other users. This website has an option to vote through a bar which has two sides - agree and disagree.

This work may aid in reducing such fake news which get spread to various platforms from news articles to social media and especially where community is involved. The community should have access to some sort of link, source or brief information about the claim instead of believing everything that has been posted over social media, or answered in any forum without providing sufficient evidence to back up their facts.

2.2 Collection of requirement

There are numerous websites like Snopes.com, Fullfact.org, Ferret Fact Service, Politifacts.org, and TruthOrFiction.com that were researched to gather requirements for the User-Interface(UI) and how the process of fact-checking operates. Moreover, various forums like StackoverFlow, Reddit, Yahoo answers, and Quora were also researched to see how an effective community based system functions with such a large audience where each day new questions and claims pop up in front of millions of users. It has been observed that not all the information that is given as answers in these forums are 100 percent factually correct. Another website which was considered to get the idea of how a forum of users work in terms of opinion and claims is Consider.it.

A MoSCoW method[16] has been followed to list down the requirements for this project. The requirements will be divided into four parts - Must-haves, Should-haves, Could-haves and Won't-haves.

Must-Haves

- 1) A very simple and user friendly interface for the website.
- 2) A way in which users can submit their claims.
- 3) Users must be able to see the claims which are posted by other users.
- 4) Users must be able to address if a particular claim is true, false or inconclusive.

Should-Haves

- 1) User should be able to give multiple verdicts.
- 2) Signing up and logging in functionality
- 3) Functionality to add comments.
- 4) Search engine for the user to search their queries.

Could-Haves

- 1) Trending topics displaying on top.
- 2) Search bar to search for facts from the database.
- 3) Voting system on verdict where a user can give a positive or a negative feedback through this.

Won't-Haves

- 1) Mediators to foresee the website.
- 2) Logging in with your social media.
- 3) Extended user profile to have profile pictures and personal details.
- 4) Rating system for each fact.

2.3 Analysis

After carefully analyzing the existing famous fact-checking websites and a few forums, the design of the website was mainly influenced by Snopes.com.

Snopes.com has an impressive design and a few ideas have been taken from it for the current website. The visual representation of a fact in Snopes.com is in boxes where each box has some sort of factor related to the fact - original claim with date and publisher, photo, origin, more details and verdict with True, False, Inconclusive or Most likely.

These days, the main source of the community involvement is forums, the major idea of how a platform with community works has been taken from websites like Stackoverflow, Reddit, Yahoo answers, and Quora. As mentioned in the background before, people usually post their claims on forums and the answers which they receive are not always factually strong.

These forums often have an option of thumbs up and down, for example in Yahoo answers, each answer to a question has an option of thumbs up or down voting system so that the user can simply see which answer was most helpful among competitors. This functionality can help in a community-based website as the users might give evidence or share more links to the existing claim and it can help in identifying the most reliable source.

Furthermore, already pre-existing fact-check websites have a designated team which does the research and analysis of the claim, the source and the truthfulness of it. These teams consist of professionals who do the job of fact-checking. However, there are few flaws which exist here such as not all the claims getting fact-checked as websites like these only tackle what they deem to be the major international claims circulating on the Internet. As these teams might not consist of members from all different parts of the world, sometimes it is difficult to understand the claim from individual perspectives.

The verdict of a given claim cannot be simply defined by true or false, as the fact could be mostly true as well with just few details about it being wrong. Therefore, such a system is followed by Politifact.com in which they have a verdict of True, Mostly True, Half True, Mostly False, False, and pants of fire. Even Snopes.com has such a system but with more verdicts such as; unproven, outdated, miscaption etc.

There are positive sides of having a large community but it also has some disadvantages as well. If we see the example of few online forums of the game World of Warcraft consist of few players who troll the other users by posting irrelevant comments which are not game related or topic related

which is a matter of cyber-bullying[17]. Such behaviour can be a challenge and could affect the balance of the platform. Another problem that could effect the system is that if a community on the platform is only from one part of the world and it does not have diversity then the result could be biased.

Thus, developing a platform which has the ability to fact-check claims and community-based involvement such as how it appear in forums will be the two main pillars of this work.

2.4 Objectives

- 1) Building a platform which can get the claims fact-checked but also has a community support like forum.
- 2) Develop the required skills to build a web application using the MERN(MongoDB, Express, React and NodeJS) stack.
- 3) All the features discussed below should be implemented and should be fully functional.
- 4) Get a user based evaluation for the application, to see positives, negatives and ideas for future improvements.

Features

- 1) Forms which can collect claim, information about the claim, source, list of evidence - URLs, Information snippet, and different categories.
- 2) A functionality for the user to browse through different categories of claim and fact-check these claims.
- 3) Search engine which users can use to do their research about the claim.
- 4) Comment system for the users to express their views on the fact.
- 5) Registration and Log-in functionality.
- 6) Addition of more evidences and verdicts.
- 7) Different categories for different claims.
- 8) Voting system to have users vote on different verdicts.
- 9) Trending fact functionality which will be decided on the number of clicks on the fact. The representation of these fact-checked claim will be descending.

Chapter 3

Design and Implementation

3.1 System architecture

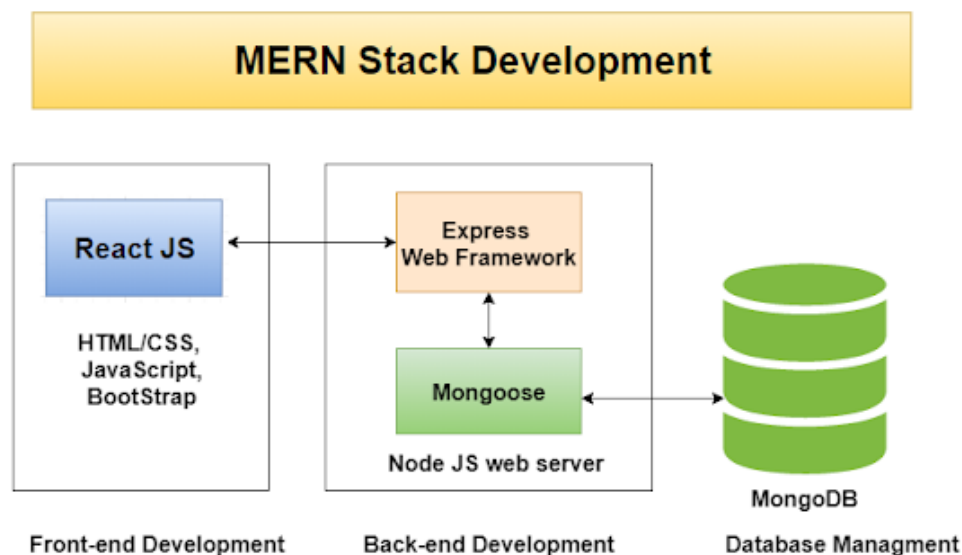


Figure 3.1: MERN architecture

Figure 3.1 [18] represents the system architecture of the Mongo, Express, React, Node (MERN) stack. These technologies have been used to develop the front-end and back-end of the current project. The common programming language used in this stack for front-end, back-end and server side scripting is JavaScript. The front end of the website has been developed with the help of a web framework called React. React was implemented as it is easy to learn, helps in faster development and has a great community support[19].

Node.js has been used for all the server development with express framework. This made the coding and setting up the routes easier. Axios was employed as a framework in order to fetch the

server request to the front end. Furthermore, MongoDB was implemented for the database and the Moongoose library was utilised to create the data models.

3.1.1 Front-End Design

During the designing phase, the main points that was kept under consideration while designing the website were the user-interface should be clean, simple, and user friendly. The goal was to have a platform where everything is visible to the user and they dont have look for functionalities here and there in the website.

The websites layout was finally decided. The website will have the buttons to browse categories which will show all the categories, from which the user can browse the fact-checked claims of that specific category and a home button has also been given for the user to return back to the home page from any specific page and few wireframes of the website were designed in order to have a clear picture of how the web application will looks like is shown in the Figure 3.2.

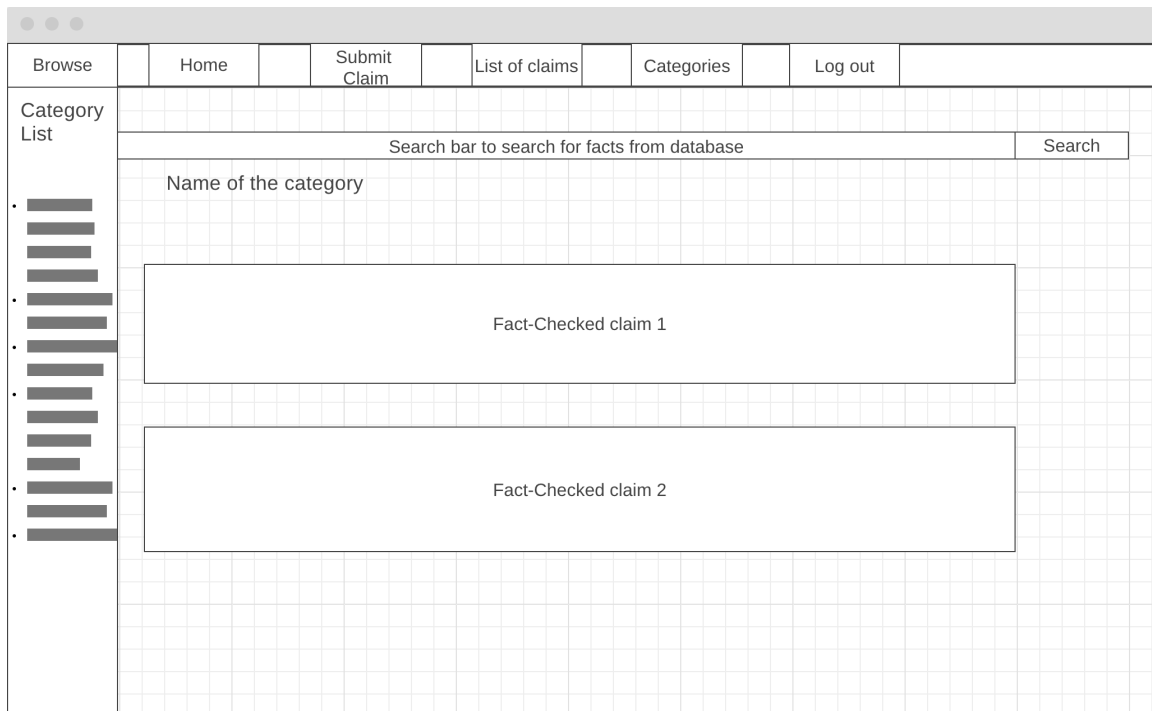


Figure 3.2: Wireframe of the page which will display fact-checked claims according to each category.

The home page was kept very simple and clear, with some instructions through which the user can navigate the website, and use the functionalities. Also to give user a very organised list of categories through which they can browse the fact-checked claims accordingly.

Sections of the website for instance, submitting a claim, giving a category, or fact-checking the claims, forms where user input was required, the layout of the overall forms were kept with just the required fields, a text box for those fields and the button to submit it. Another form which has been

designed for the user to fact-check the claims required a search engine so to design that and use the space efficiently, the search bar and query results will appear on the right side of the page and left the side will be covered with the form to give verdicts with check box. A wireframe was designed for these forms and can be seen in the appendix section.

For a clean and neat look, each claim has been kept in a different box where the user can see the title of the claim and some text underneath it. A very similar approach has been followed for the page where the user will see the details about that fact-checked claim, the user will see the title, text underneath which will be the information about that claim, the source and finally the date and time.

Underneath this box, the user can see the list of evidence items which consists of a link, a snippet of that link and a verdict with an icon of a tick mark or a cross representing true and false respectively. As per the requirement, multiple verdicts should be visible in this section so a line is being used to divide them, and an upward and downward arrow has been given on the right for the voting.

After designing the wireframes, a react-based template was decided to be used, which has been built with React, Material-ui, CSS-in-JS styles and React router[20]. It was a simple dashboard with the UI and no functionalities of its own. It had the pages, material UI icons, login/sign up modules, and buttons which made it very simple to integrate with the back-end.

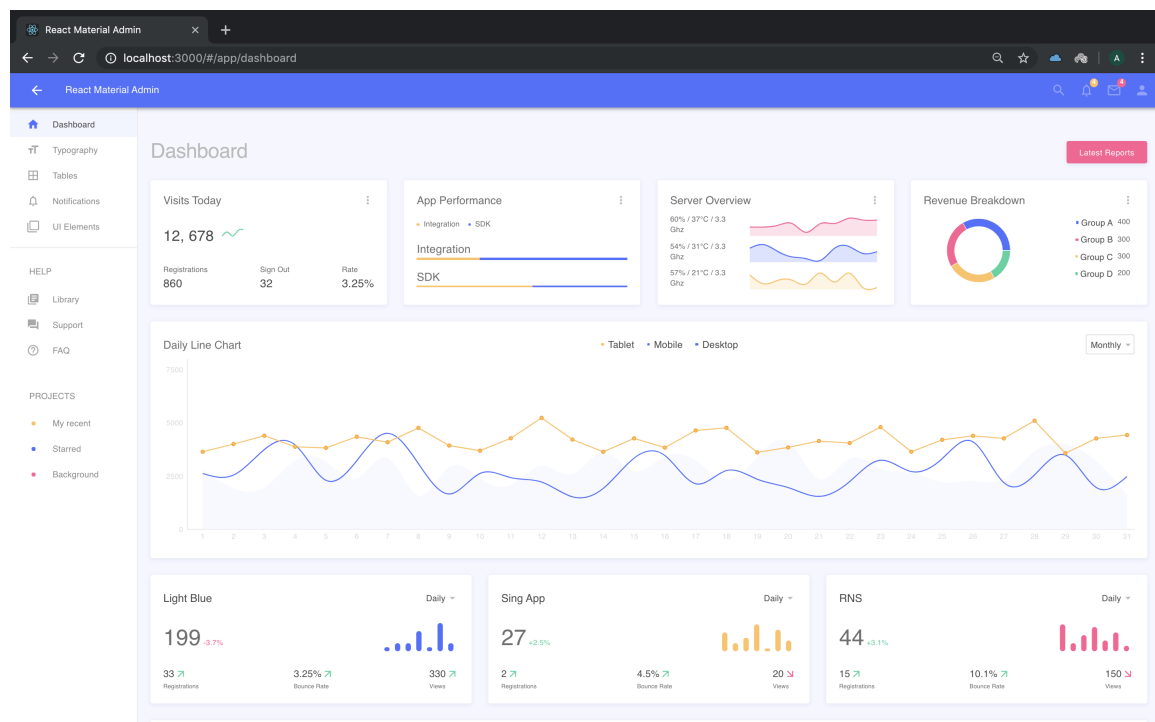


Figure 3.3: Original React Material Admin Material-UI Dashboard Template.

If we look at Figure 3.3, it was just a dashboard with typography, icons, buttons and login or sign up page but with no functionality. Therefore, only the features like side bar, buttons and icons were taken and the whole template can be changed according to the website requirements.

So, after analysing all the factors of websites user-interface, this template was the perfect match for the design requirements that were set up for the website, as it also had a login/sign up module

which was integrated accordingly in the website.

3.2 Implementation

Front-End

Features that were gathered during the requirement phase have been implemented, For instance to give a better platform where user dont have any limitations in terms of choices of the category, the website gives the user the freedom to give their own category so if they feel that the claim which they want to submit does not fit in any of the predefined categories. However, this feature is only for the users who are registered with the website. A form has been given to the user which lets them add categories, and they can submit a claim for that specific category by filling the Claim Submit Form. This will allocate the claim under that specific category. Each category will have a search bar on top which will look for fact-checked claims in the database and display them to the user on regardless of the category they are in. This is not just limited to a search in that specific category as the user can see the search result of all the claims on any category page. Moreover, the website has a feature of authentication embedded which will only let registered users access certain features of the website.

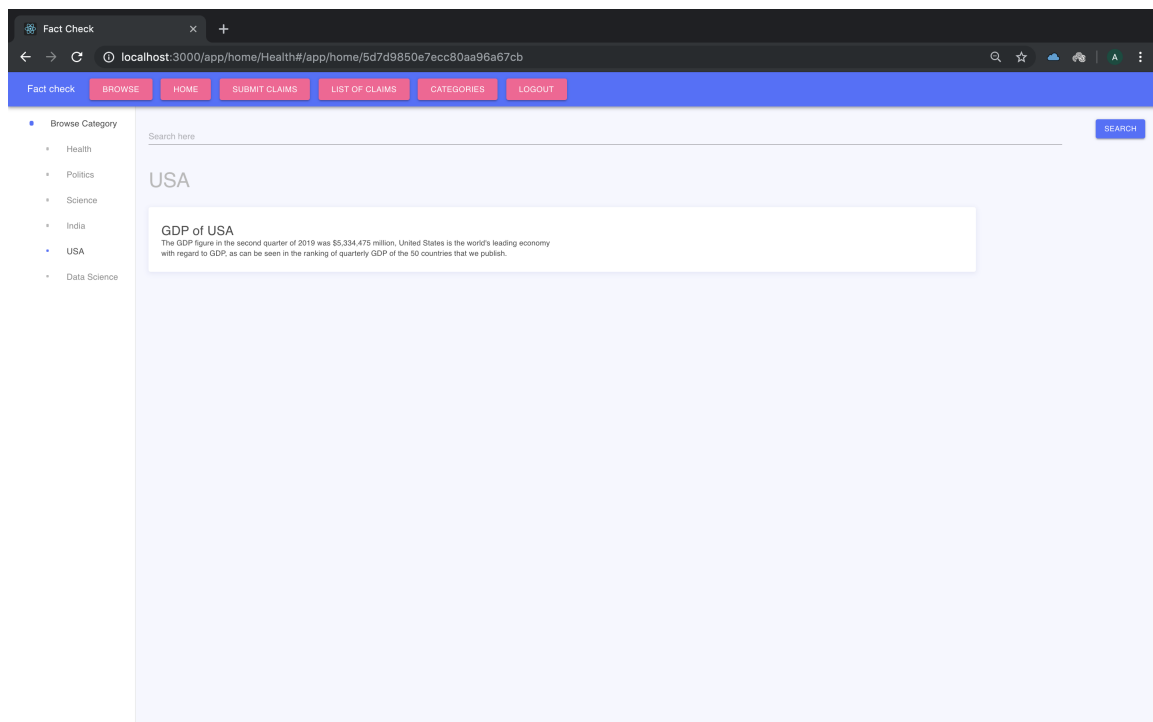


Figure 3.4: Home page of the website to browse through various categories.

Furthermore, to make users check the claims submitted by other users, a list of claims get displayed according to the category that was selected while submitting the claim for the fact-check (See Figure 3.5). This was implemented to have a better categorisation in the website.

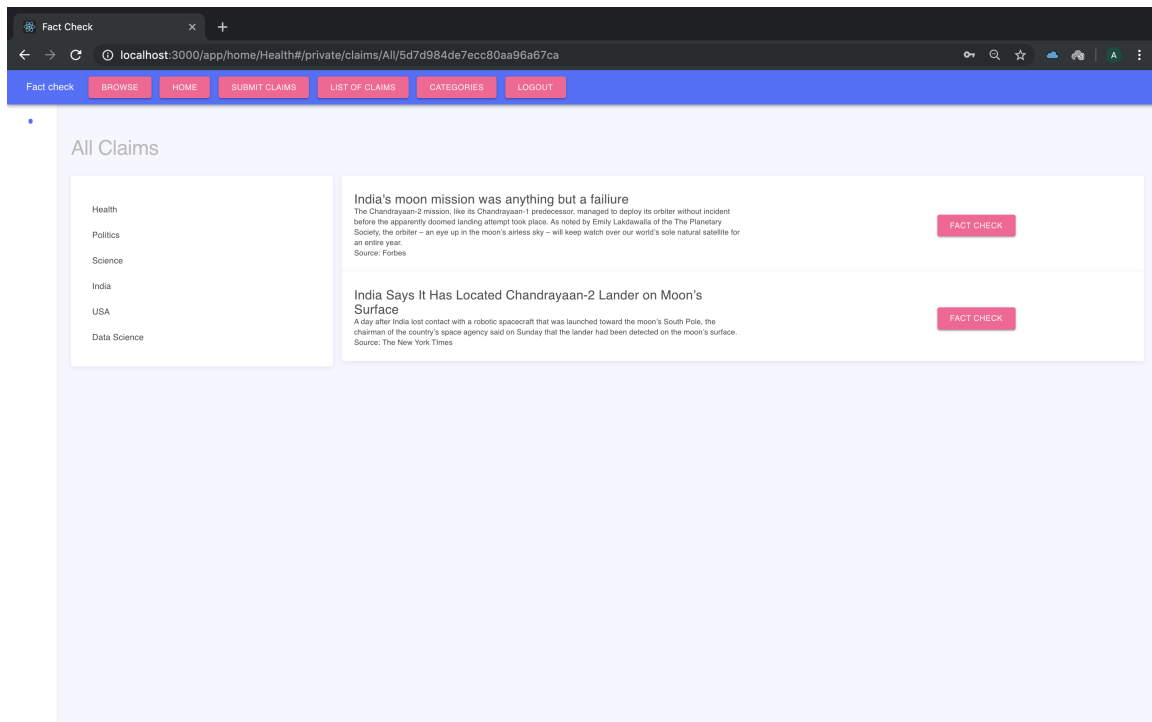


Figure 3.5: Categories which holds the claim

To implement fact-checking feature in the website, Another form has been made for the user to fact-check the claim. A New York Times search engine Application Program Interface (API) has been integrated on the left side of the page for the user to do their own research regarding the claim which they are fact checking. In addition, an 'add button' gets displayed on the right side of each search result which adds the URL and the snippet of the link to the form which will be used as evidence for the claim for further convenience of the users. The form also has three check box selections for the user to decide if the fact is either true, false or inconclusive based on the research that they do about the claim. When the user decides to submit the fact-checked claim, it appears under the specific category which was originally placed in.

Furthermore, the user can navigate through each category and can see the claims which have been fact-checked. Another feature that has been implemented is the system of having trending facts, which will be displayed according the number of clicks on the fact by the user. For instance, if fact B has the most amount of the clicks in that specific category, it will appear on the top and the rest will be in descending order depending on the number of clicks that the topic has received. So, if the user wants to see details about that fact-checked claim, they can just click on that fact and see the claim, information about it, date and time when it was uploaded.

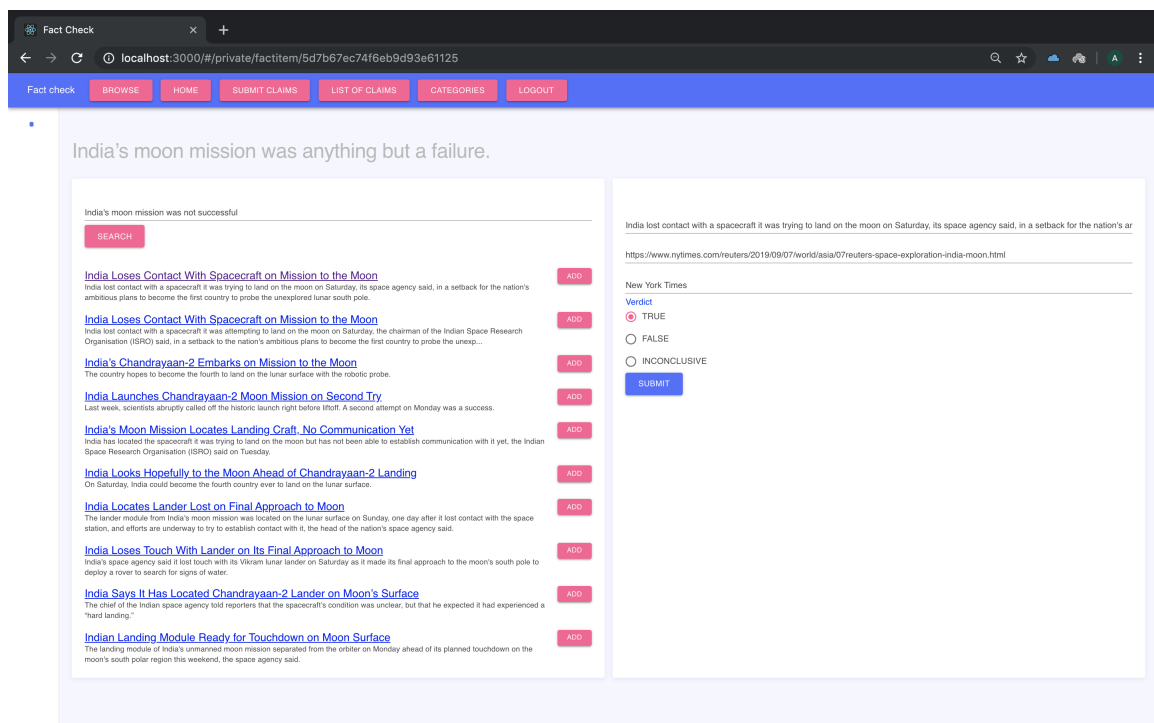


Figure 3.6: New York Times article search API along with evidence and verdict form has been integrated in this page.

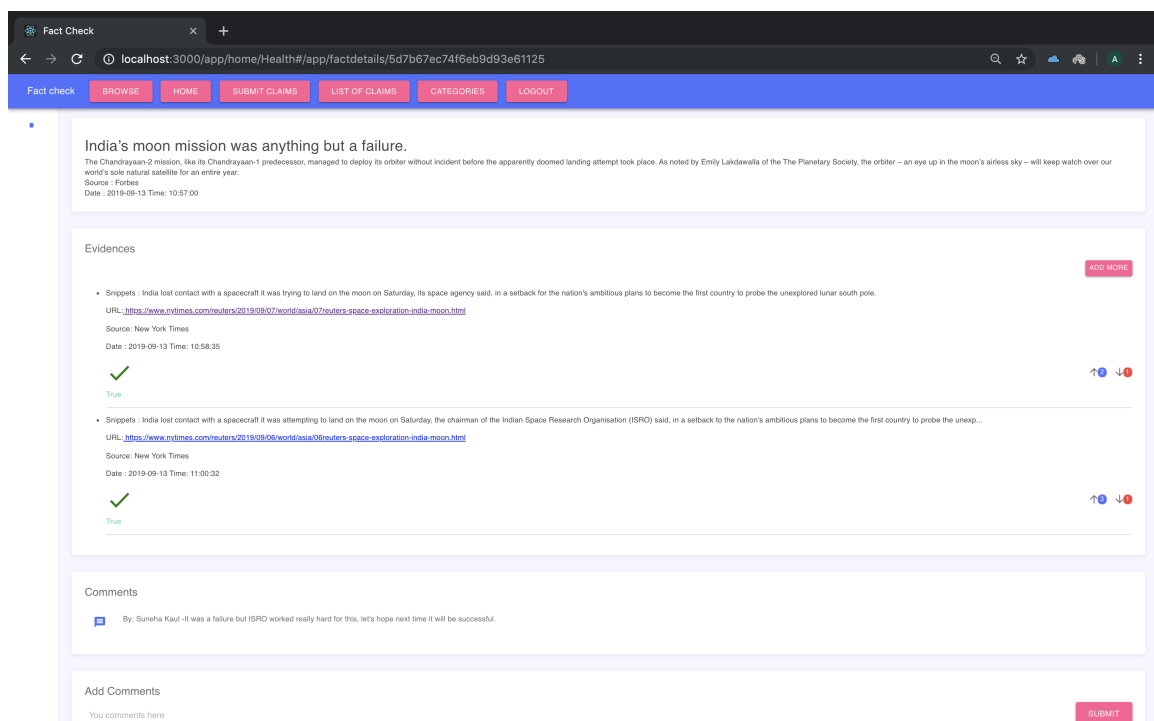


Figure 3.7: This page displays the details about the fact checked claim - verdicts, evidence and comments are integrated in this page.

The verdict which was originally given by the user who fact-checked the claim, will be displayed in the box of evidence. Moreover, to have a more community based perspective on the verdict, a voting system has been given on the right hand side of the verdict to let the user decide the vote count. This feature shows the vote count with upward and downward facing arrows and has a visual numeric representation.(See Figure 3.7).

By considering the fact that users from different community might not agree with the evidence the other users provided, a button has been added to add more evidence and verdict which will take the user back to the page which has a form with New York Times search engine to add more evidences and verdicts accordingly.

For more community engagement, a comment system has been implemented in the website. This will let the user comment on each fact-checked claim with the name that they signed up with, which will further encourage more user involvement.

Back-end

To create the data models, Mongoose library was used on the Node.js platform, which has been further exported to the Express framework in order to give the necessary routes for the data models. Another advantage of Express framework is that it made coding for the server side scripts easy.

These models have been exported to the routes in which they handle the GET request through `app.get` and POST request through `app.post`. In addition, with the help of express, the application will listen to those requests that will match the specified routes and methods of the forms and the data models[21].

React-router also helped in URL mapping for the website. When one sees the claim and clicks on the fact-check button, the router takes them from `'http://localhost:3000//private/claims/All'` to `'http://localhost:3000//private/factitem/:id'`.

A middleware application has also been used in the `server.js` file. It has been implemented in between to process the request and send the response of each route when the user makes a request. In `server.js` each route has been called in a Middleware by `app.use();` function. It has also been used with express to parse json file as our server is communicating in json for GET and POST request.

MongoDB has been used for the database. The database consists of six collections which have been used for the functionalities of the website. The login/sign up page has a user collection, categories has a collection which holds all the categories that are added by the user and it also has , evidence has a collection for the URLs and snippet that the user can add while fact-checking a claim, comment system also has a collection to hold all the comments which are added. Furthermore, claims has a collection which takes the claim submitted by the user along with the user ID by which it was submitted.

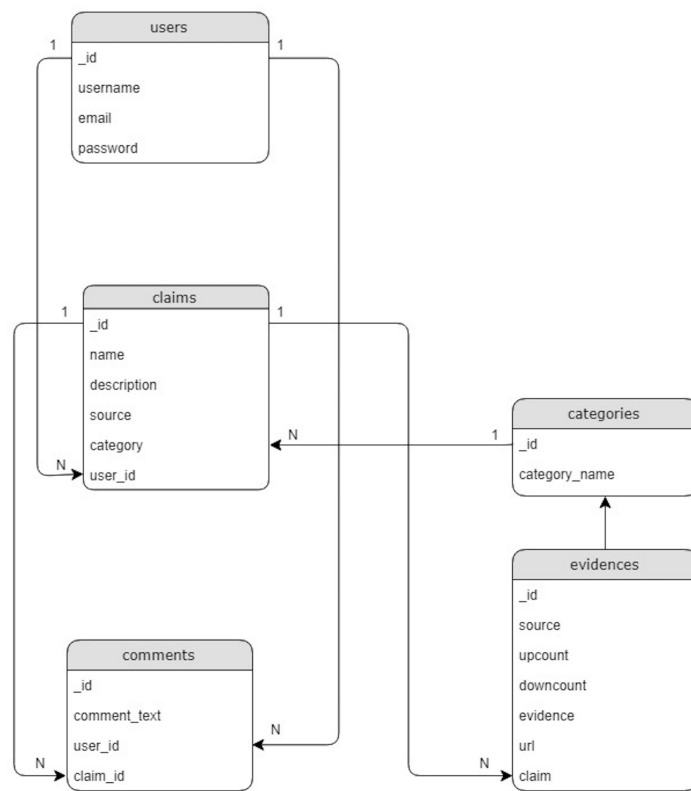


Figure 3.8: Data Models

Chapter 4

Testing and Evaluation

4.1 Testing

Web application testing has few parts and each part has to be tested thoroughly. These steps consist of Functionality testing, Usability testing, Interface testing, Compatibility testing, Performance testing and Security testing[22]. Each step of the testing has been performed on the web application to see if any errors or bugs exist. Even though tools like Jest are available for testing react based applications[23], a manual testing approach has been followed here considering the fact that it is less complex and limited time was left.

Errors that were discovered during testing -

- 1) The user had to double refresh the page when you install the node modules for the first time in the project(npm install) and launch the web application. It just happened the first time and after that a double refresh was not required when you launch the website through "npm start".
- 2) When the user added a category, a refresh was required in order to display the new category on the side bar of the website.
- 3) The voting system does not have a limit of one vote per user but the votes gets counted and it is visible in the database as well.
- 4) If the user types out the details in the fact-check form rather than clicking on the add button, they would not see a line separating their verdict and list of evidence from others.

All the functions and forms of the website that were required to perform specific tasks are working properly and each feature has been noted down in a table(see Figure) which represents the functionalities that are implemented in the web application and their status. The interface of the website is clean and simple as it was one of the main requirements of the website in the development phase. This was kept in mind as the criteria of the website was to be simplistic but at the same time attract the users.

All the modules such as user login/register details, claim along with the user ID, comments and categories entries get updated in the database. The web application is very responsive and works on different browsers like Opera, Google Chrome and Safari. However, as the website has not been

launched on a domain and it is still on the localhost, it was not possible to test it on a mobile or any other devices currently. Moreover, the website does display an error message if required, for example, when a user enters the wrong password while logging in or when a user tries to enter an existing email address.

In terms of the security testing, only an authorised user who either already have signed up for the website or is currently logged in can access certain pages and use certain functionalities. It has been tested that if the user is not logged in then they will not be able to access the claims or add a claim page. Furthermore, the user will not be able to either comment or add more evidence or verdict to the fact checked claim.

4.2 Evaluation Strategy

A user based evaluation was conducted in order to get the web application tested and obtain user feedback on design, usability and functionality of the website.

The evaluation was carried out in two parts; the first part required the user to follow specific instructions to test the functionalities of the website and the second part was a survey in which a feedback was recorded for the functionalities, usability and design.

The following instructions were given to the users:

- 1) Register on the system by clicking on the sign up button and filling out your full name, email address and password.
- 2) Try to add a category of your choice by clicking on the category button and simply fill the given field and click on the home button after that to refresh the page.
- 3) Try adding any claim in the category that you recently added by clicking on the add a claim button and fill out the form and select your category in the drop down menu.
- 4) Try Fact-Checking that claim by clicking on the fact check button and use the search engine do your search which is available on the right side of the screen. After doing the search regarding that claim, just click on the add button and it will fill out the URL and the snippet available for the evidence and you can fill out the source of your information as well.
- 5) Try the search bar available on top of the category by searching for your fact-checked claim and click on it.
- 6) Now try to comment on that fact-checked claim by typing in the comment box and click on the submit button.
- 7) Now try adding more evidence by clicking on the "add more" button.
- 8) Now log out and try to access the restricted areas of the website without logging in.
- 9) Now try to log in using the wrong password.

According to the survey conducted, all the instructions that the user were told to follow worked perfectly. The study had 12 participants. All 12/12 performed both the phases of evaluation. The survey consisted of questions that required a yes or a no for an answer to test whether the features of the website were working as mentioned to the user or not. All the comments user gave were on the spot were noted down, a linear scale was also used to get the websites usability analyzed as 1 being very useful and 5 being not very useful.

4.3 Evaluation results

The overall feedback of the website was positive, as mentioned in the evaluation strategy, all the 12 users were able to complete the entire set of instructions perfectly. The design and interface was very streamlined and simple to understand for the users and after giving out the instructions, the users were able to learn and transform the features very smoothly into practice.

Few users gave some level of constructive criticism. One of the users thought that the website could be biased unless there are large number of web visitors. One possibility of this could be when only a certain part of the community uses the website, then the fact checking could be biased. Another user also suggested to utilize a different search engine rather than using The New York Times search engine.

The majority of the users gave a positive feedback as 12/12 users found the website functioning as per the instructions that were carried out during evaluation. All the users found the website's UI very clean and simple as they were able to learn all the features of the website and were able to operate the website afterwards without any instructions. Overall, the users were pleased with the functionality of the website and were interested to expand their knowledge about the process of fact-checking.

Furthermore, the users gave an overall score of 2 out of 5 in terms of how useful they found a community based website; 1 being very useful and 5 being not at all useful (Figure 4.1). During the evaluation it was found that 9/12 users had never used a fact-checking website before so it was a good sign to see the users showing interest and involvement in such a website. Most of the users felt encouraged to use a fact-check website again in the future.

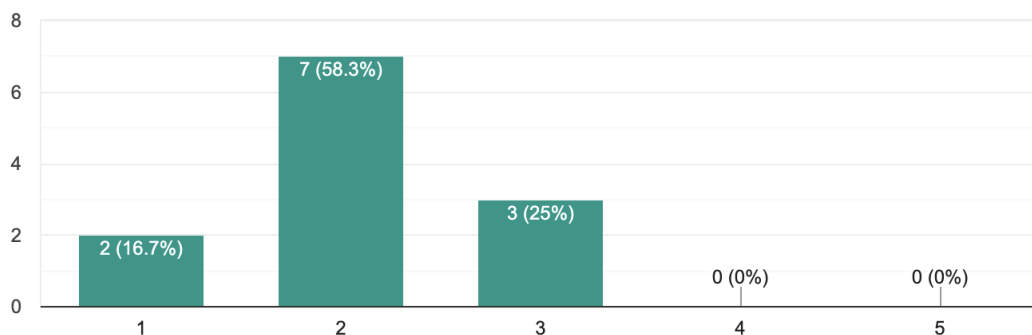


Figure 4.1: How useful the users think a community website like this will be in real world?

Shortcomings

The only shortcoming that was encountered that there is no limitation on the number of votes that users can make on the verdict, even though the upward arrow and downward arrow is connected to the back-end and each vote gets counted by the database for any fact-checked claim. So if one vote was limited to each user then this feature could have been better theoretically, but still the users can see the number of votes and this can be implemented in future works.

Chapter 5

Conclusion

5.1 Status

The web application has been developed as per the requirements that were set up at the beginning. All the functionalities except for the voting system on the verdict are fully functional and providing the result that they were expected to give. Features like getting the claim fact-checked by the user, trending fact-checked claims getting decided by the number of clicks on it, and addition of more evidence into an already fact-checked claim are the most important features of this web application.

Furthermore, it would have been even better if the users had the option to login through their social media or they were able to share the fact-checked claim over the social media. If the user had more options to customise details like profile picture and information then it would have been even better.

5.2 Achievements

This project has helped me in understanding the implementation of MongoDB, Express, React and Node.js. I understood the in-depth architecture of the website from working with front-end to developing the server side scripts for the back-end.

5.3 Previous work

As discussed in chapter 2, there are websites which exist for the propose of fact-checking but a team is there who decides the verdicts of those facts. There are no community-based fact-checking websites which let the user give the verdict for the claim. Similar approach has been followed in a website like Consider.it which lets the user create a forum and the other users can vote if they agree with the opinion or not but the main purpose of that website is not fact-checking.

5.4 Future Improvements

1) Mediator supervision

It would have been better if a mediator would be there to see what kind of claims are being uploaded before they get displayed to the other users for fact-checking. Another benefit of having a mediator is to refine the comments that might dis-balance the decorum of the website.

2) Extended user profile

More features for the user in their profile as of now the user just have a login and log out feature but if the user had profile pictures, option to give some information about themselves, and could access the other profile of other users as well then the user interaction would be more.

3) Social media login and sharing.

User can login through their social media and share the fact-checked claims on it as well.

4) Limited number of votes on the verdict by the user.

This feature was not properly implemented. A user can vote multiple times on the verdict without any limit even though the voting system is connected to the back-end and gets updated in the data model.

5) Getting the user ID for Fact-Checking and voting on verdict in the database.

In this project, user ID gets fetched only for claim submission, login/sign up, and comments. It will be a nice addition to the current data model of the Evidence and verdict.

Appendix A

First appendix

A.1 Section of first appendix

Features	Status
Login and Sign up	Working
Adding a category	Working
Adding a claim	Working
Claim under the correct category	Working
Fact-Checking the claim	Working
Searching on the search engine	Working
Adding the evidence items	Working
Submitting the Fact-Checked claim	Working
Comment system	Working
Trending topic system	Working
Submitting more verdicts	Working
Voting on verdict	Partially working
Trying to login with the wrong password or email address	Working
Not being able to access restricted pages of the website without logging in	Working

Figure A.1: List of features tested

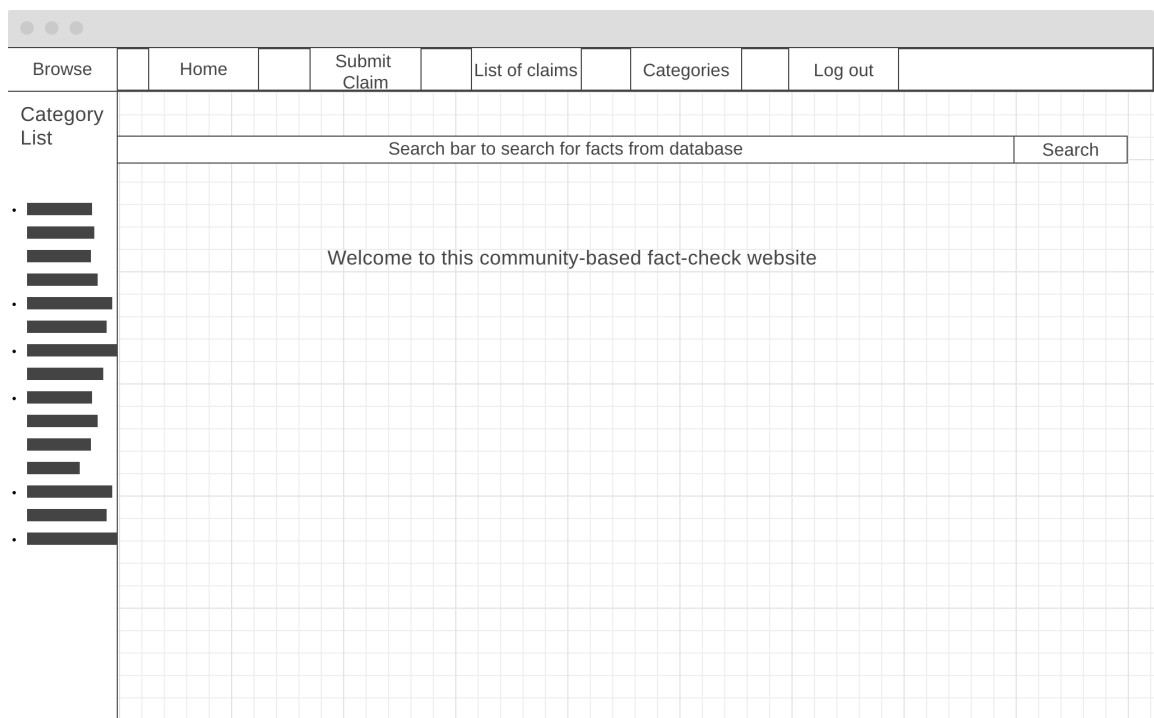


Figure A.2: Wireframe of home page

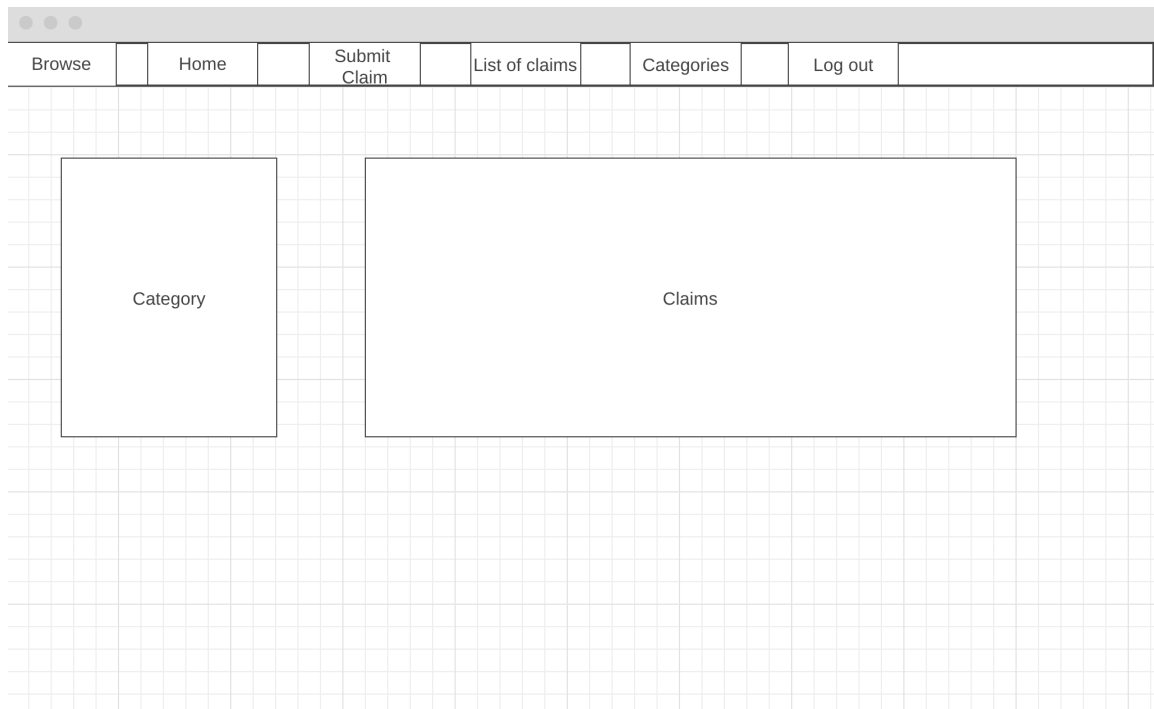


Figure A.3: Wireframe of claims page

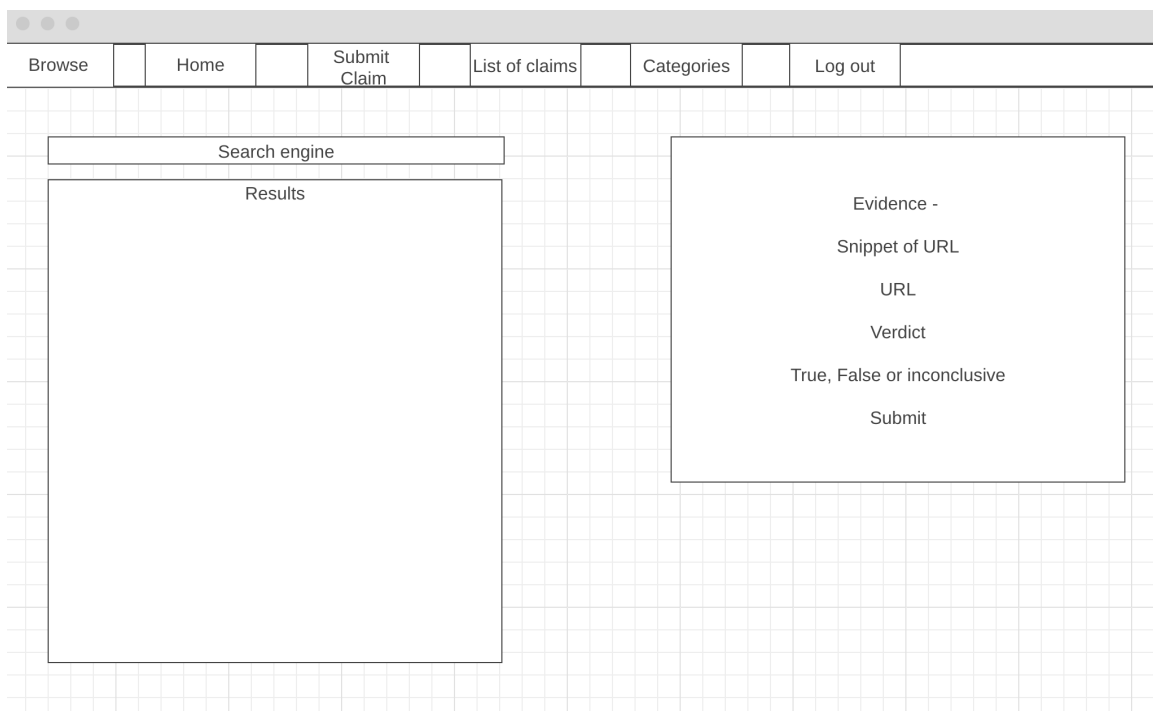


Figure A.4: Wireframe of adding evidence item page

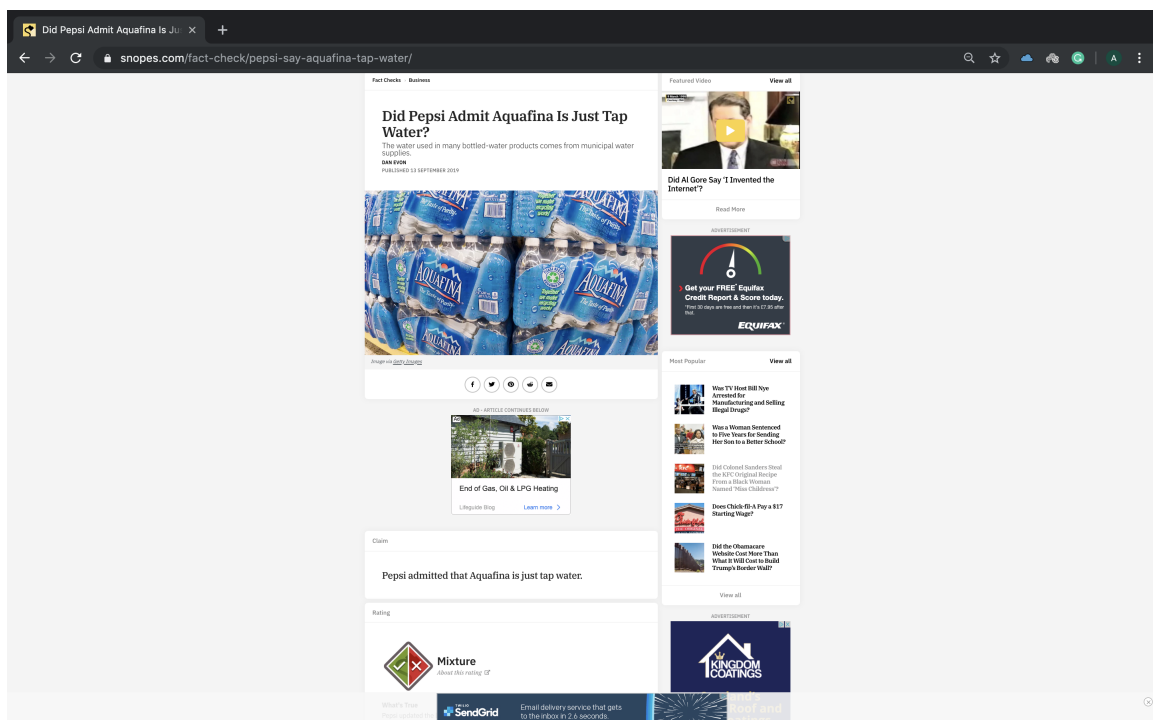


Figure A.5: Snopes.com fact-check page

Appendix B

Second appendix

A community-based Fact-Checking Website

Thank you for agreeing to take part in my study.

The aim of this fact checking website is to build a web application which will help the community in the whole process of fact checking. The application will let users submit their claims and these claims can be fact-checked by different users. This community of users can share different perspectives from a diverse point of view, who can further indulge in discussions on different fact-checked claims through functionalities provided in the application.

The purpose of this evaluation is to get the website tested by other users and get a user based feedback of the website.

The evaluation consists of two parts -

- 1) You will be required to use the website with the following instructions below.
- 2) You will be required to complete a survey in which you will be asked to answer which questions regarding the functionalities, interface and useability of the website.
https://docs.google.com/forms/d/e/1FAIpQLSdN5Xmf83OodT4K-0WVuuTlox2IPuvRNt3zIM_f41p6-xEEA/viewform?usp=sf_link

You are free to withdraw anytime during the evaluation process and if you wish that your name, email address and password should be deleted after the evaluation, just let me know.

Instructions :

- 1) Register on the system by clicking on the sign up button and filling out your full name, email address and password.
- 2) Try to add a category of your choice by clicking on the category button and simply fill the given field and click on the home button after that to refresh the page.
- 3) Try adding any claim in the category that you recently added by clicking on the add a claim button and fill out the form and select your category in the drop down menu.
- 4) Try Fact-Checking that claim by clicking on the fact check button and use the search engine do your search which is available on the right side of the screen. After doing the search regarding that claim, just click on the add button and it will fill out the URL and the snippet available for the evidence and you can fill out the source of your information as well.
- 5) Try the search bar available on top of the category by searching for your fact-checked claim and click on it.
- 6) Now try to comment on that fact-checked claim by typing in the comment box and click on the submit button.
- 7) Now try adding more evidence by clicking on the "add more" button .
- 8) Now log out and try to access the restricted areas of the website without logging in.
- 9) Now try to log in using the wrong password.

You can find me at: 2419831s@student.gla.ac.uk

Figure B.1: Instructions given to the user for the evaluation.

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