

A UX Case Study

FACT CHECK

Designing a digital platform for the detection of fake news by analysing human behaviour



Context

As part of my final term research project at the University of Creative Arts, I proposed a solution to tackle the dissemination of fake news. The app will assist the user to stay updated with facts and maintain peace & harmony in society.

[Click here for the Complete Report >](#)

Solution covered

Mobile App

INTRODUCTION

We all are getting addicted to Internet and social media for various reasons. Especially, social media is being used as a source of information and findings show that the frequency and popularity of misinformation are high on social media.

71% Americans now get news content via social platforms

57% Mentioned that the news they see on social media is largely inaccurate

1:10 Ratio Fake news spreads faster than genuine news.

Types of Fake news

False Context

When genuine content is shared with false contextual information

Manipulated Content

When genuine information or imagery is manipulated to deceive

Fabricated Content

New content, that is 100% false, designed to deceive and do harm

Satire or Parody

No intention to cause harm but has potential to fool

Misleading Content

Misleading use of information to frame an issue or individual

Imposter Content

When genuine sources are impersonated

False Connection

When headlines, visuals or captions don't support the content



THE NEED OF THE HOUR...

Fake news can have serious consequences. The spreading of fake news is an undesired threat to the human race. It weakens harmony in society. Below are some of the impact caused by fake news.



Bullying and violence against innocent people



Financial impacts



Democratic impacts



Impacts on health

WALL STREET & MARKETS
How Does One Fake Tweet Cause a Stock Market Crash?
By Christopher Matthews | April 24, 2013

Share Read Later
CNBC TV18

Pakistani TV channel broadcasts fake news of UK PM Boris Johnson's death
Updated : April 09, 2020 06:30 AM IST
> Johnson remains in intensive care unit at St Thomas' Hospital in London, battling coronavirus.
> The United Kingdom is one of the worst-affected countries by the

BBC Home News Sport More
NEWS Menu
World Africa Australia Europe Latin America
Middle East US & Canada

'Hundreds dead' because of Covid-19 misinformation
By Alistair Coleman
BBC Monitoring

This Week in Asia / Society
WhatsApp rumours have led to 30 deaths in India. In this social media disinformation age, the only question is: who's next?
• Anger at a terrorist attack in Kashmir has opened the floodgates of disinformation, which civil

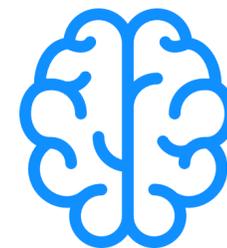
The Washington Post
Democracy Dies in Darkness
Fact Checker • Analysis
How misinformation on WhatsApp led to a mob killing in India

What led to a WhatsApp mob killing in India? | The Fact

OBJECTIVES

Investigating a design opportunity that helps in the verification of fake news and educate users accordingly.

Steps to achieve this objective are



Behaviour

What instigates the users to share the fake news?



Pain points

Pain points involved in checking the genuineness of the news.



METHODOLOGY

I wanted to examine the pattern and understand the various aspects of people consuming the information in day-to-day life. Therefore, I chose two basic approaches to viz. Qualitative Research and Quantitative Research.

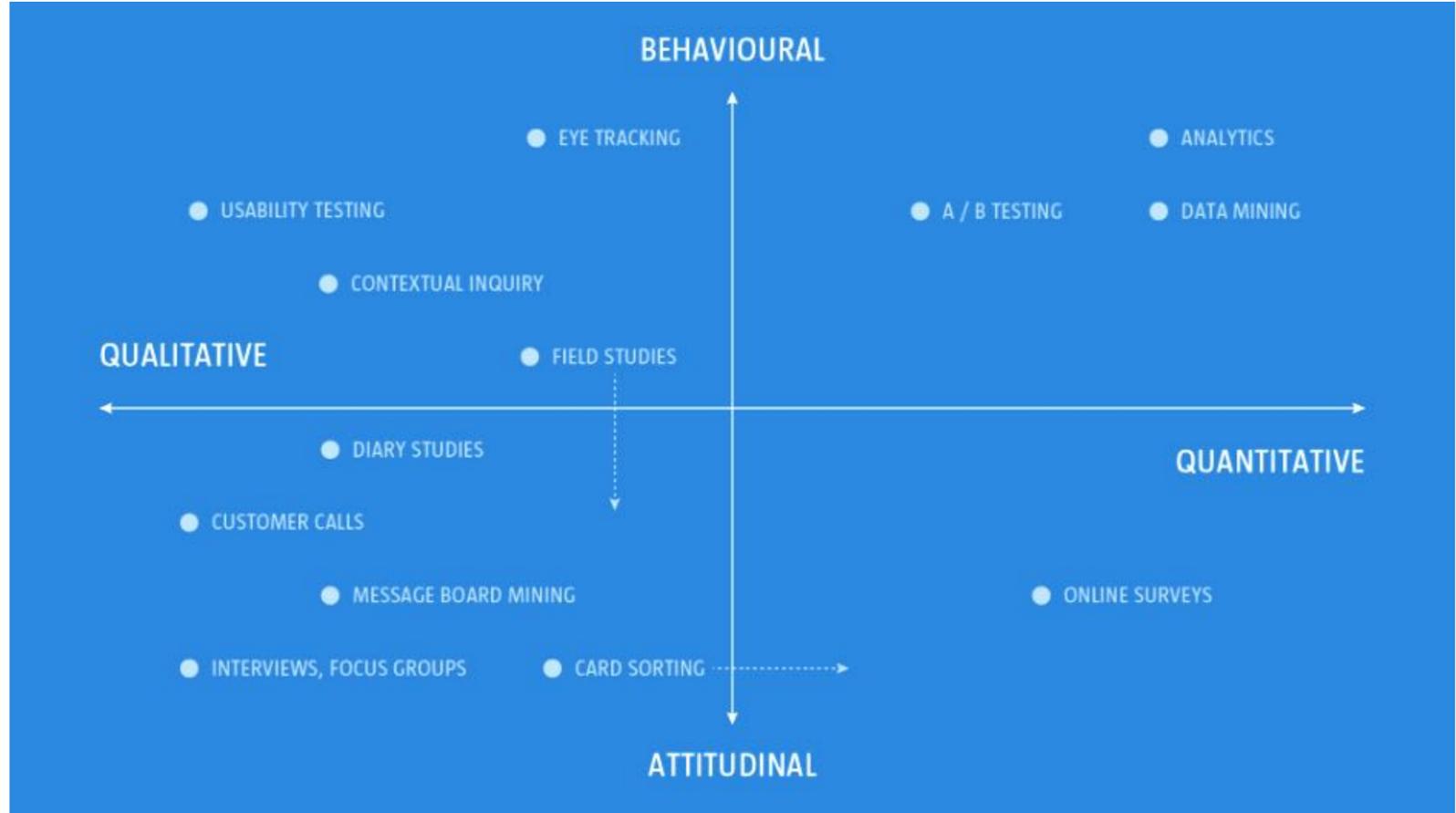


Fig: The research landscape, where the method is mapped against the axis

Research Process followed



Literature Review

Referred 70+ journals/papers



User Interview

Interviewed 5 users



Online Survey

Collected 40+ responses

LITERATURE REVIEW

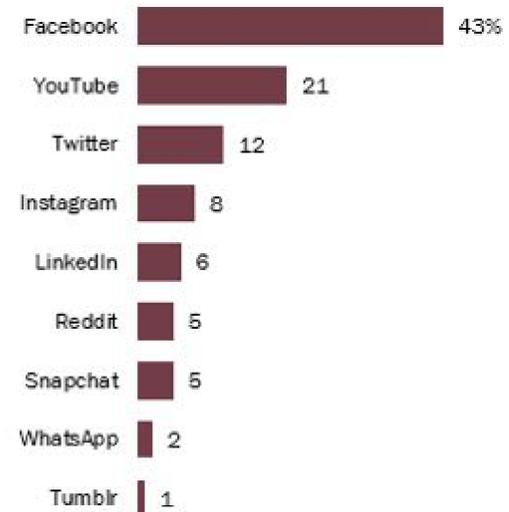
Effort led by social media on fake news

Human Psychology and fake news

Current available solution

Social media sites as pathways to news

% of U.S. adults who get news on each social media site



Source: Survey conducted July 30-Aug. 12, 2018. "News Use Across Social Media Platforms 2018"

PEW RESEARCH CENTER

Fig: % of US adults who get news on Social media site

Summary of actions taken by Social Media Platform

- Tie up with a third-party, a fact-checking organisation.
- Uses Machine Learning to detect fraud and inauthentic spam accounts.
- Displays labels and depicts warning messages.
- Suspends accounts of users who spread fake news.



LITERATURE REVIEW

Below theory explains about the relation between human behaviour and fake news. Additionally, We share the information to reaffirm something we have already believed as true, which forms an echo chamber cycle. Therefore social media has, more than 70% of the fake news likely to be retweeted than the real news

Effort led by social media on fake news

Human Psychology and fake news

Current available solution



Naïve Realism

We firmly believe that our perceptions about the information we know are true and anything contrary to it is biased.



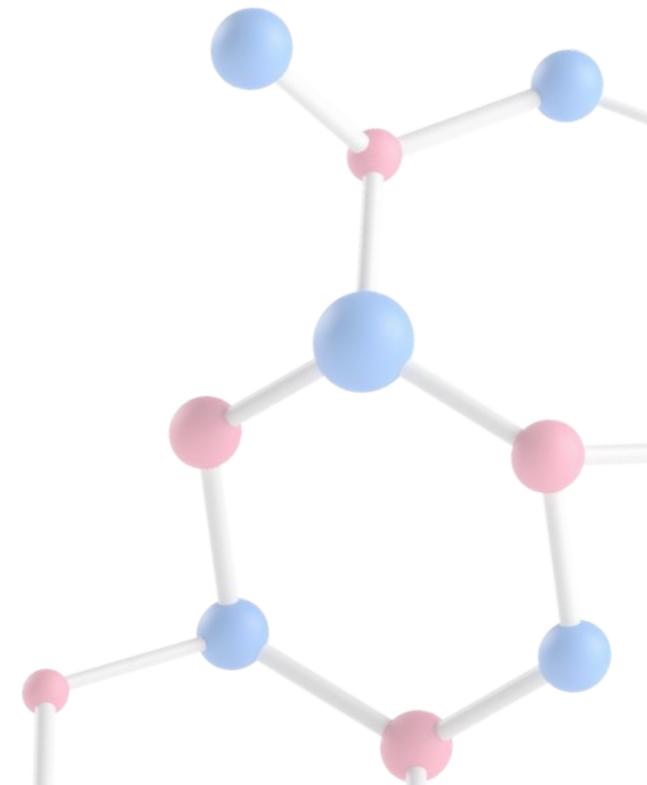
Confirmation Bias

We like to receive information that conforms or match with our belief.



Galaxy brain

Highly emotionally provocative information being incorporated into long-term memory banks.



LITERATURE REVIEW

Effort led by social media on fake news

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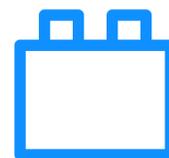
Fact checking services

Services that are available to check the accuracy of information. Politifact, Snopes etc. Limited to region, genre etc.



Mobile Applications

Maintains a database of global fact-checking sites but not fully functional.



Plugins

Available for browsers majority of the plugins are not fully supportive/functional.

USER INTERVIEW

A user interview was conducted with 5 participants below are the take away concluded at the end of all the sessions

Summary of the Interview

- All the participants mentioned that they are aware and cautious about the fake news that is being circulated.
- Most of the participants expressed that they won't easily trust the information that they receive.
- The user would be more likely to believe the information if they received it from a reputed source or known person.
- 4 out of 5 mentioned that they never made any effort to check the information
- participants mentioned that they believe the information more if it comprises suitable images and videos.
- Participants expressed that they tend to believe the information more when they repeatedly hear the same news from multiple sources.



EMERGING THEMES

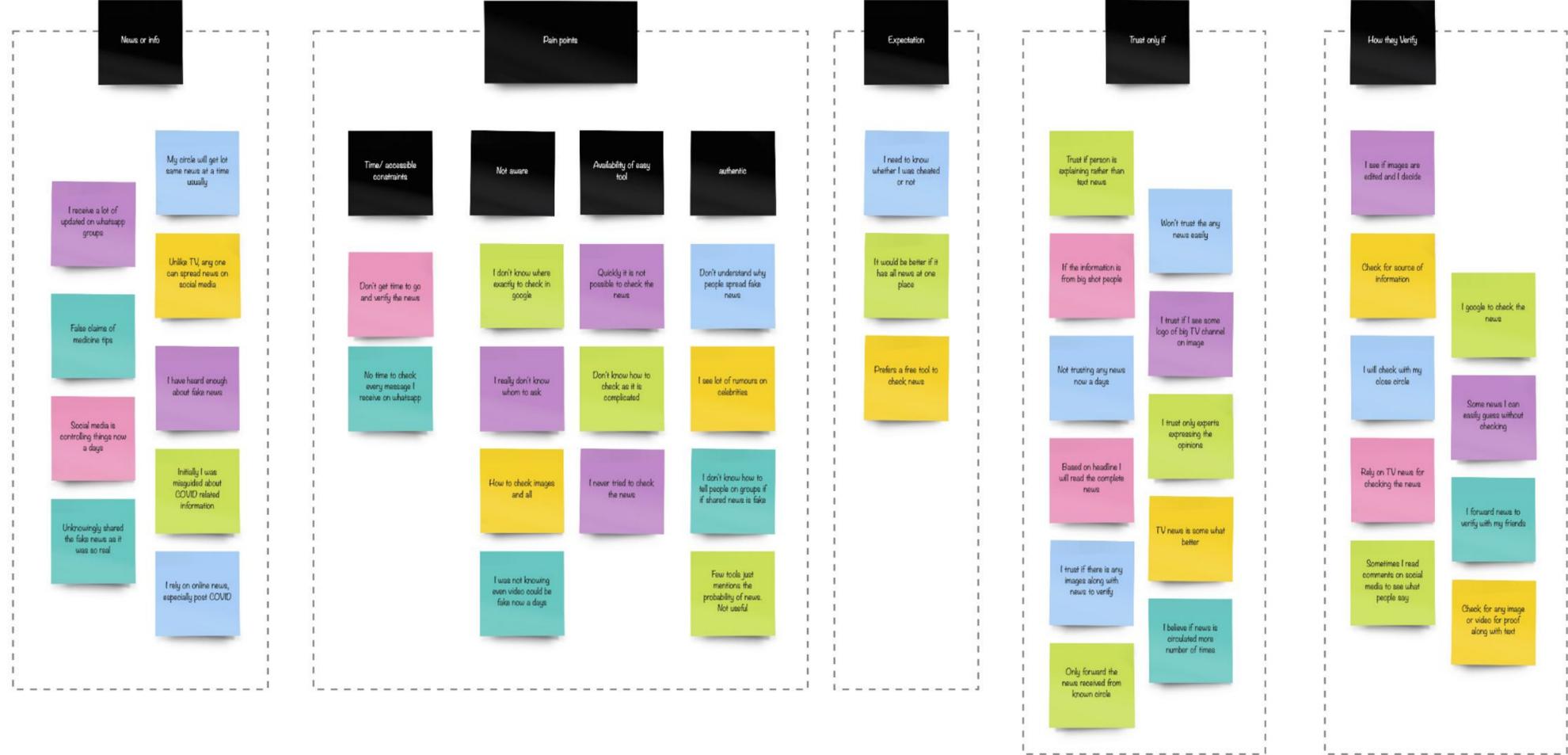


Fig: Organising the insights from discovery phase

Emerging Themes

Data captured during the discovery phase was categorised into themes.



FRAMING USER



“
Nowadays, I don't trust
any news.
”

Susan Rider

Occupation: Insurance agent

Age 42

Location: New York

Friendly

Helping nature

Active

Values the reality

BIO

Susan is a 42-year-old insurance agent who is known as an active and energetic person within her friends and family group. She believes that a strong and expansive network not only helps her to get more commission but also helps in developing long-lasting relationships. She has been handling smartphone for a couple of years and has been active on WhatsApp and Facebook lately. Since she has a bigger friends circle, she is fond of sending forwards and sharing information with her friends and family groups. Recently, she encountered an embarrassing scenario by sharing forwarded news which was debated on the group and later turned out to be fake news.

Goals

- To quickly check the authenticity of any received news.
- Forward messages which are only authentic.
- To be known as a resourceful person within her group.
- To be a responsible citizen by not sharing fake news.

Challenges

- Not aware of any particular website/tool to verify the news
- It's a lengthy process to google and find out the authenticity of the news.
- There is no guarantee of getting facts if I google and it is such a waste of time.
- I rely on various platforms for news which is always difficult to verify.
- Difficult to judge the authenticity of news circulated on social media even if it contains images/videos.
- I get to read the same news again and again which makes me believe it.

Motivation

- Easy to check the news
- Ability to share the facts
- Educate on fake news in advance
- Supports different formats

Persona

Persona gives a brief representation of the real target user and briefs about their character, pain points and goal etc.



Fig: User Persona

USER STORY

User Story



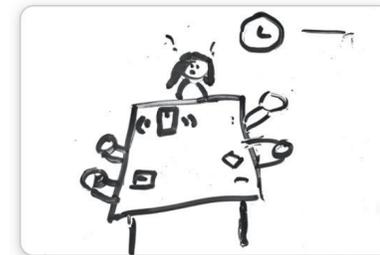
Starting her week, Susan gets ready for the office to meet her clients.



She finds time while travelling in Cab & checks Facebook on her phone. She came across news which says 'Government will ban all the Insurance agents in the department'.



Susan gets emotionally disturbed by looking at the news and shares the news across multiple groups and platform.



Disturbed by Susan's message, her friends start calling her.



After her busy day, Susan checks her WhatsApp group where she the lengthy discussion and some people mocking her and asking for proof.



Susan gets tensed and forwards that message to the close circle asking if they have any information. Later she fails to get any lead.



Susan tries to find the result on Google but again fails to find the facts.



After facing the backlash, Susan apologises to the group. From now she is afraid to share any information and lost trust on social media.

A day in the life

Created a storyboard considering how Susan got into an awkward situation after forwarding the news to her group and later turned out to be fake news.



Fig: User Persona (As is scenario)

IDEATION PROCESS

WHAT MAKES IT DIFFICULT TO SOLVE?

Before jumping to ideation, Started with the base question and tried to capture all the possibilities.



IDEATION PROCESS

Priority mapping

To evaluate these ideas, a priority matrix was done based on the impact and feasibility of each idea.

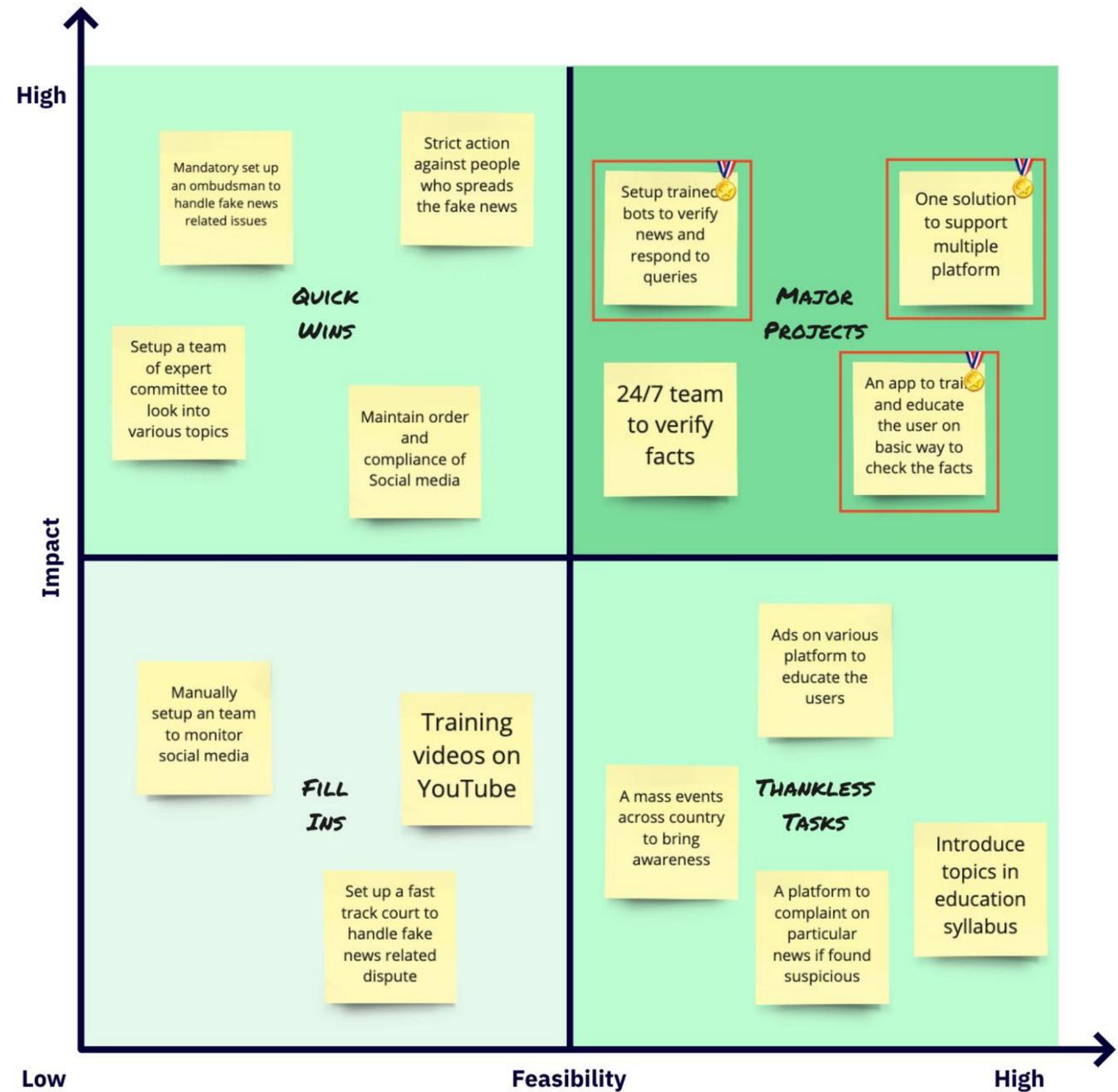


Fig: Priority mapping

DESIGN PROCESS

Information Architecture

The purpose of IA was to arrange content so that the visual blueprint of the product's infrastructure can be defined.

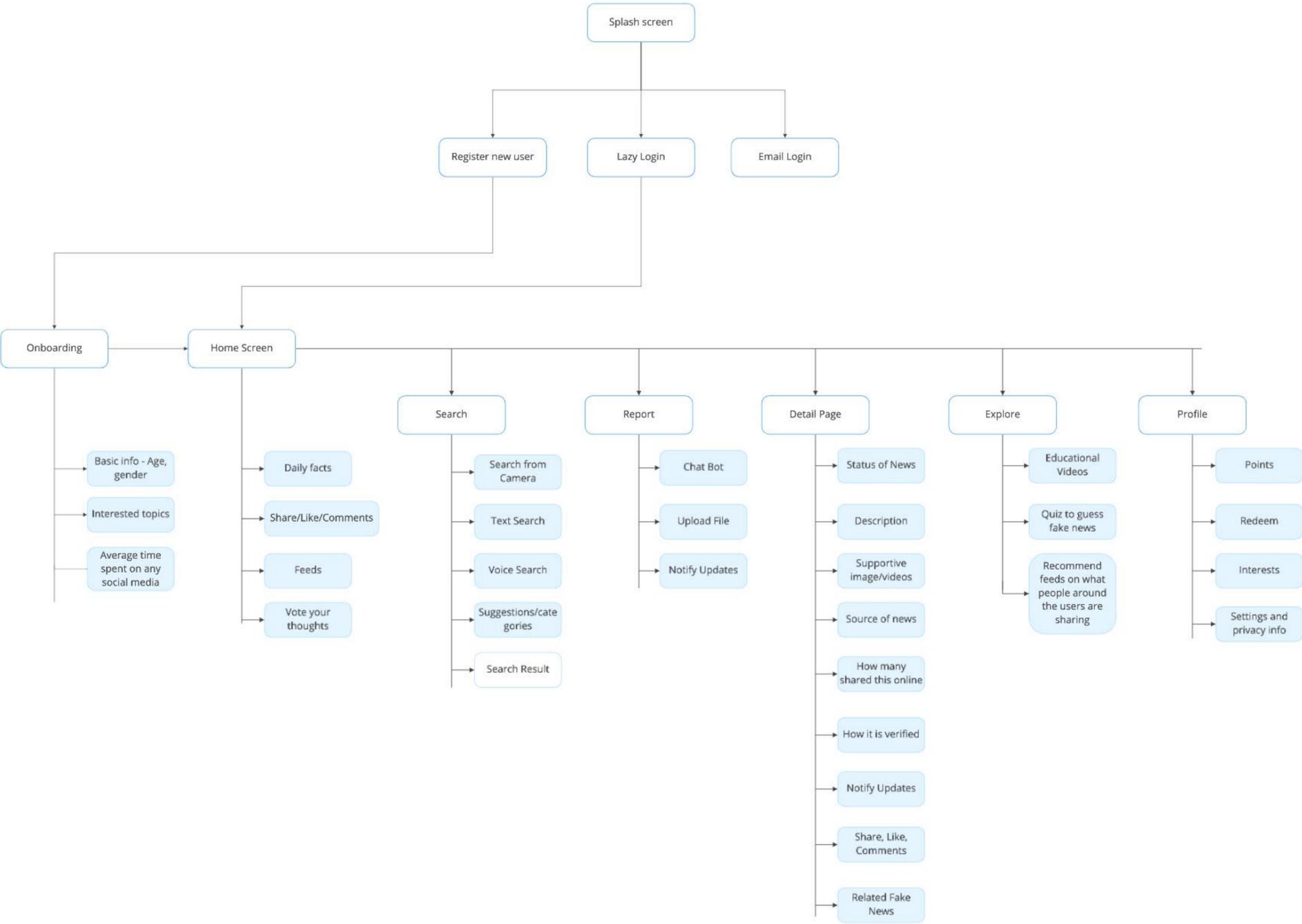
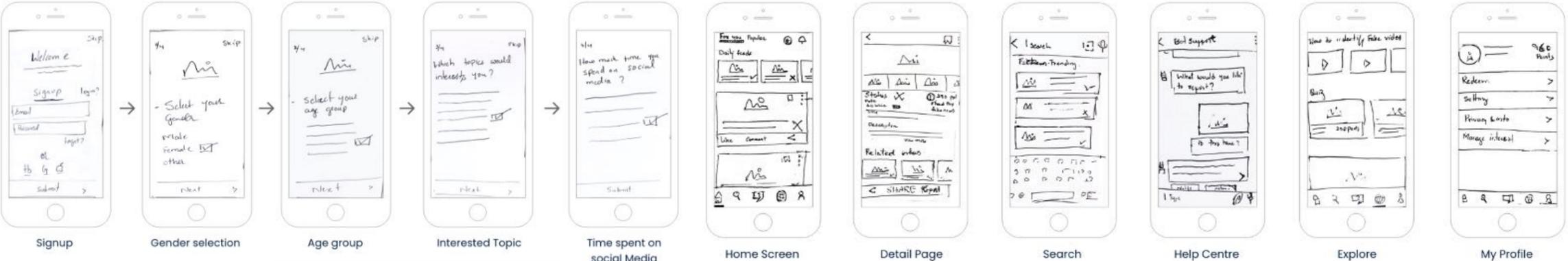


Fig: Information Architecture

DESIGN PROCESS

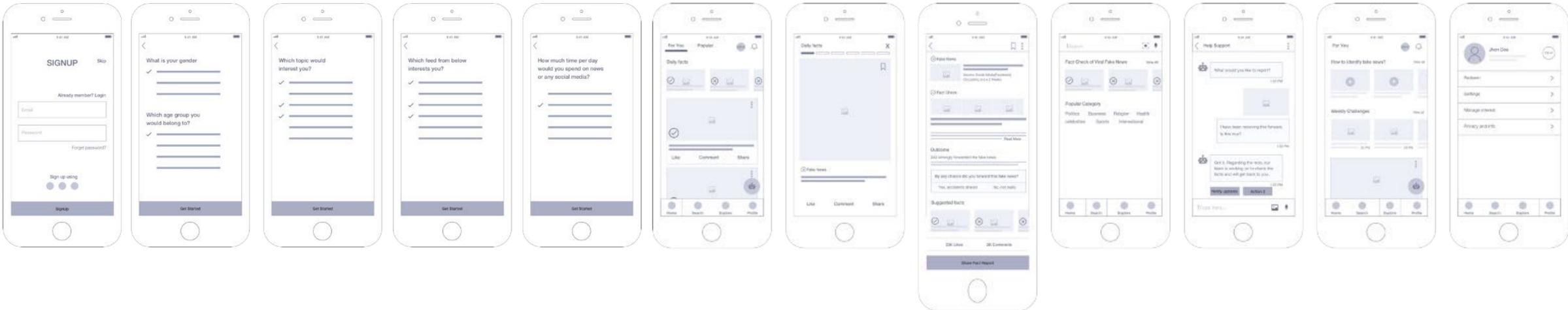
Low Fidelity Wireframe



User testing



High Fidelity Wireframe



USER TESTING

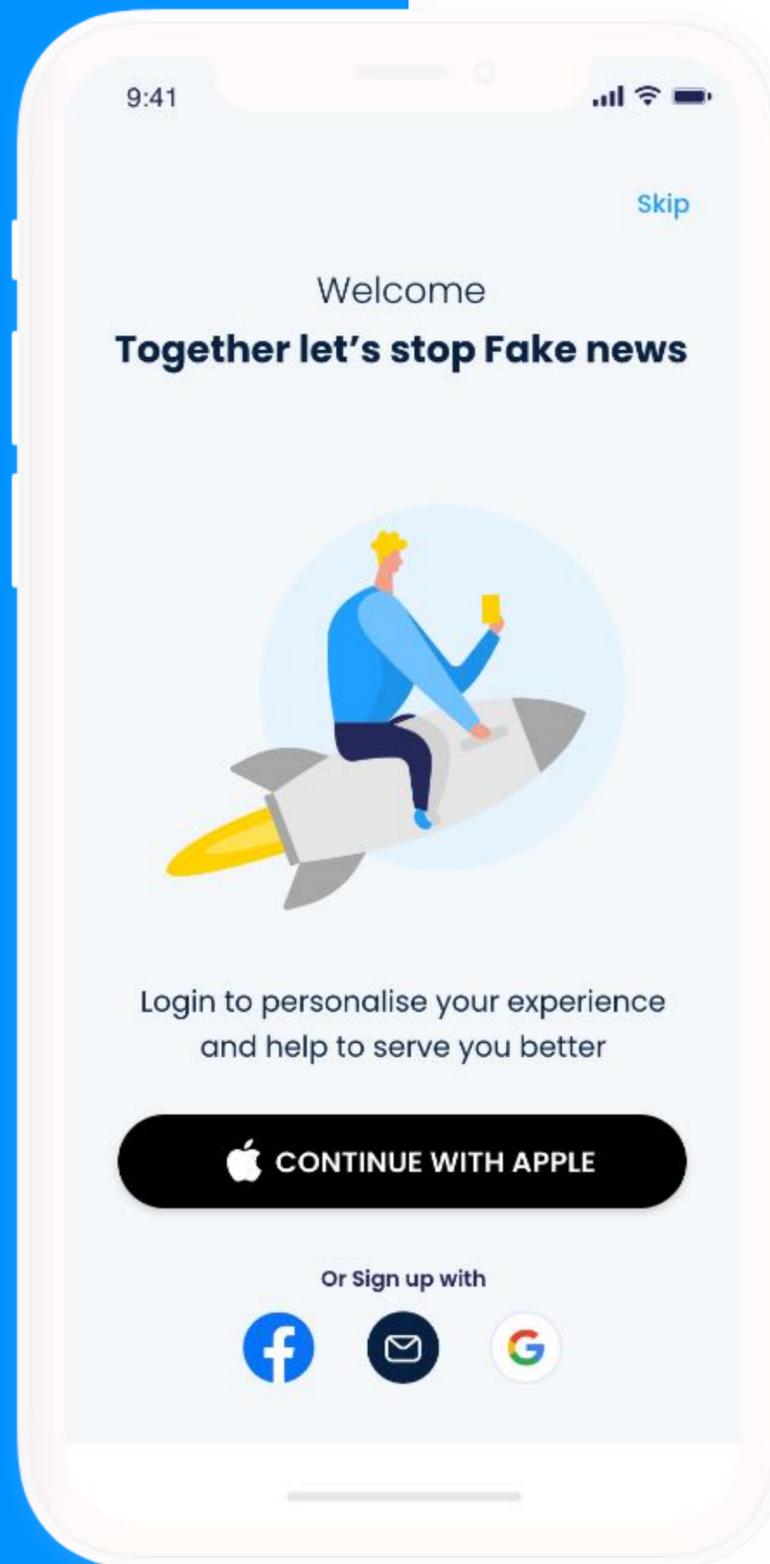
Users were given the clickable prototype and asked to complete two tasks: search the given news and look into the details of fake news. The following are the key points gathered from their feedback.

- To have an easy access to help and support bot.
- Lengthy onboarding flow
- Quicker way to find facts using voice command.
- Options to stay updated with the status of claimed news if the review is in pending state/
Mostly false.



VISUAL DESIGN

Minimalistic design principles were used to achieve ease of interaction through a frictionless interface.



Personalised experience

Based on user behaviour and interest, the app suggests relevant content.

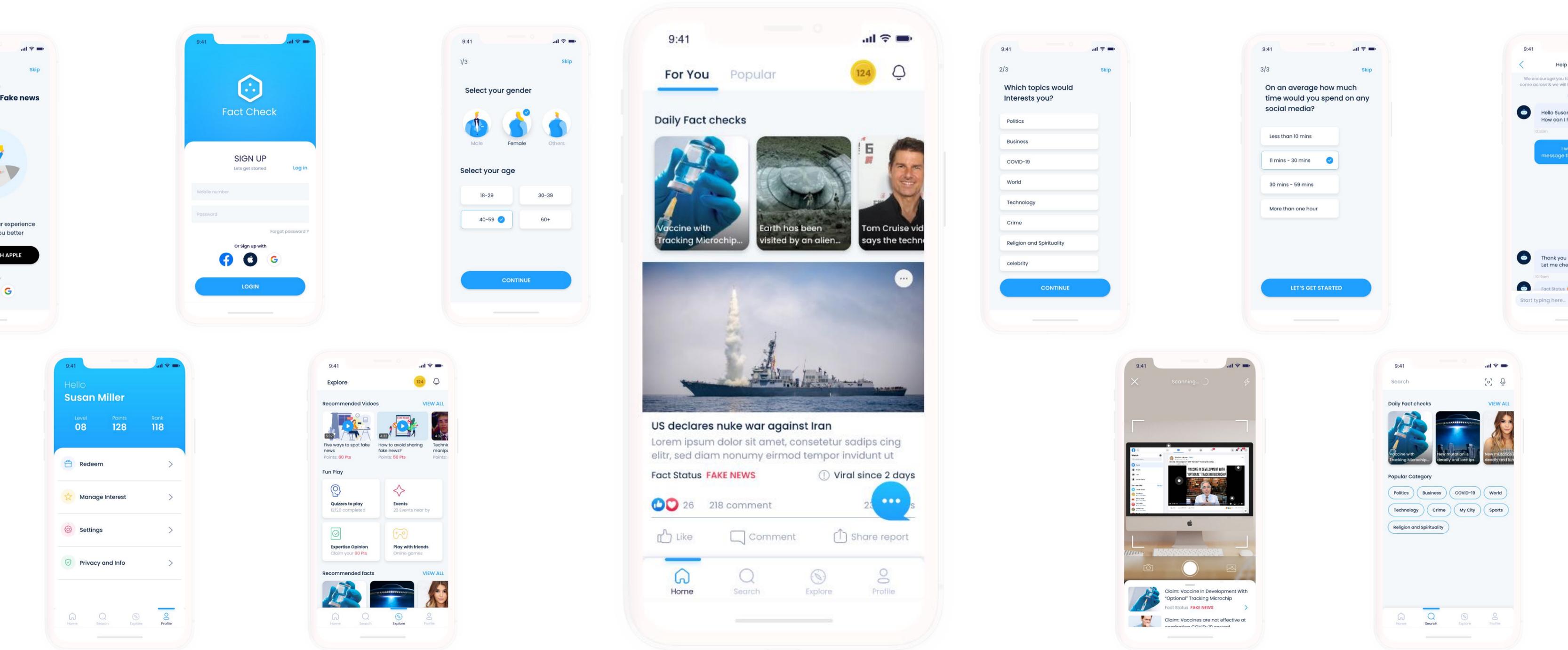
Simplified Search

The app provides multiple ways for user to search the facts.

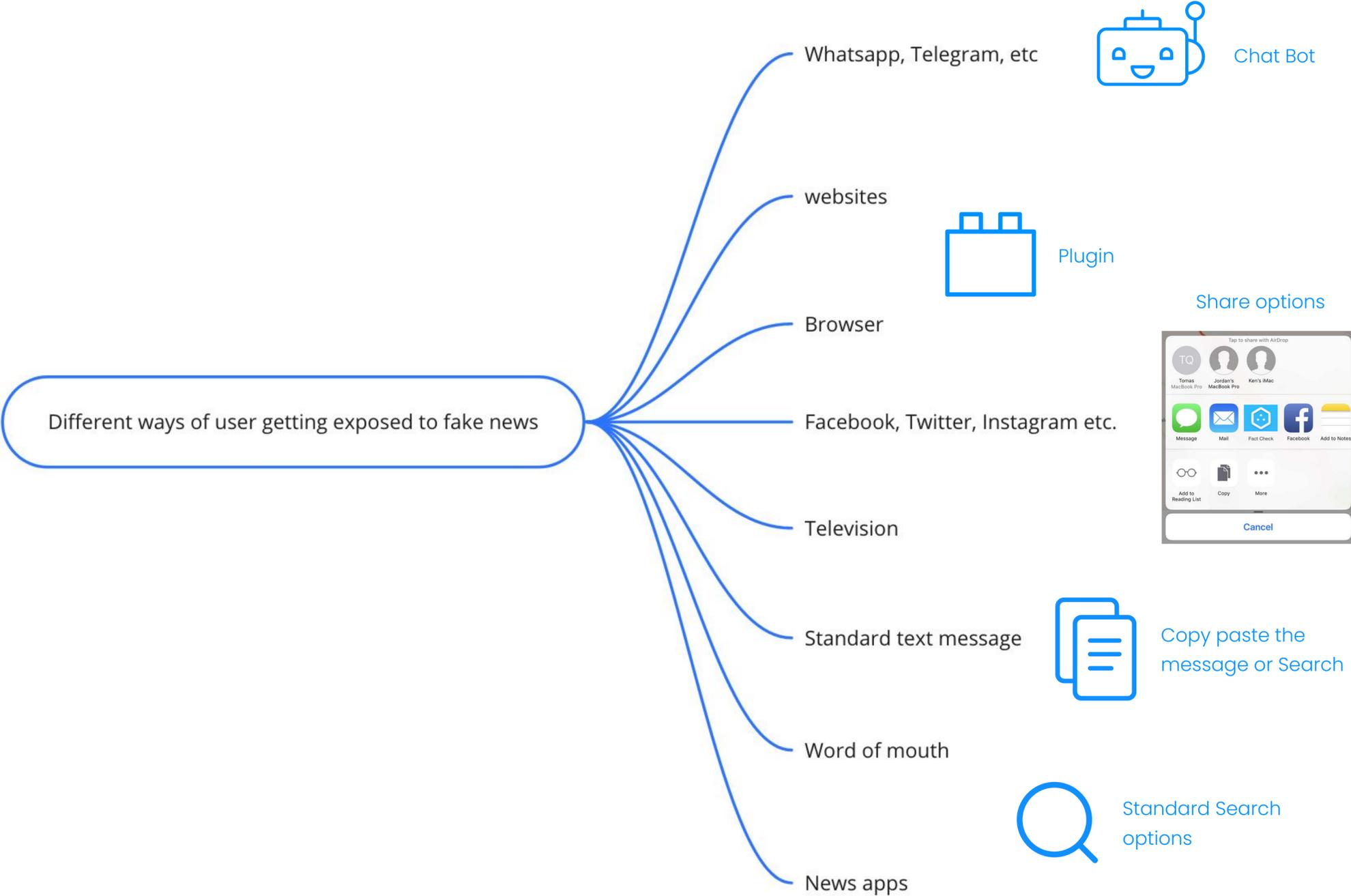
Gamification

To engage and motivate consistent participation of users gamification technique is introduced.

VISUAL DESIGN - RESULT



DESIGN PROCESS



Add-ons

Extended the ideas to support various scenarios such as website, plugins, tab, google assists/echo, WhatsApp bots etc.



CONCLUSION

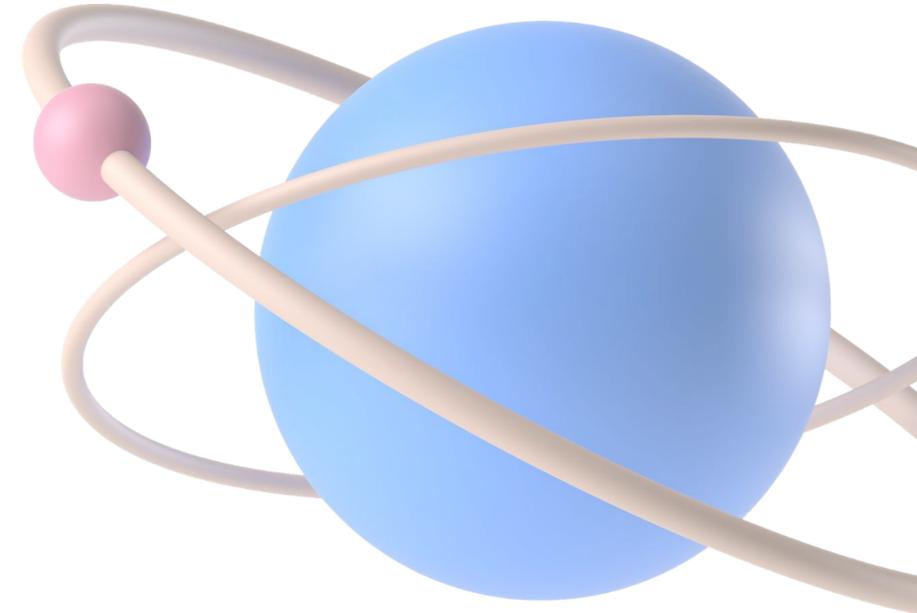
If properly implemented, it will be a huge contribution to maintain social harmony and peace by curbing fake news. Unless some solution is found, there is every chance of worsening the situation.

LEARNINGS

- Multiple stakeholders need to put their hands together to control the spread of fake news.
- Educating users about fake news is extremely important.
- Early user testing provided valuable feedback

FUTURE DIRECTION

- Iterating the experience based on user behaviour and analytics.
- Technology improvements in the field of Artificial Intelligence and Machine Learning are required to identify fake news effectively.
- API support for different other applications and social media platform which might be a great business model.
- Should be extended to other devices as well.



THANK YOU



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