







DE-FACE: DEEP FAKE & CATFISH DETECTION PROPOSAL

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OUR IDEA

We are looking to application as a solution to security issues such as deep fakes and personal photos being stolen online. This would provide people with control over their own images. It would stop images being stolen and indoctrinated into suspicious sites and used against them.

WHAT WE ARE WORKING ON



SECURE

Make sure our app is secure and does not share any private information about our users



ACCESSIBLE

Allow our app to be accessible by all users and make sure it is easy to use



FAST AND RELIABLE

Make sure the app runs smoothly and if there is a problem for it to be resolved quickly.

NOW



Images can be freely stolen, altered and shared



Difficult to get unauthorised images removed



People unaware of where their image is used



FUTURE



Altered images are automatically flagged



Reports effective as verified by facial signature



People can track where their image is used





“Privacy - like eating and
breathing - is one of life's
basic requirements.”

—**KATHERINE NEVILLE**



MAJOR REQUIREMENTS



IMAGES

A program to scan social networks for matching of a facial signature must be developed



USER EXPERIENCE

An application interface where users are able to allow and report which accounts post their images



INFORMATION

A system of verifying and encrypting facial signatures must be developed to ensure all information is secure



User Stories

- User Story.** *As a social media user, I want to be able to check if my photos have been stolen from any of my profiles so that I know all my images are under my control.*
- Acceptance criteria.** *Given: A user has a social media account online. When: the user scans their face. Then: the software will check if this face appears on any other social media accounts.*
- User Story.** *As a social media user, I want the option to flag stolen photos so that I can get them removed online.*
- Acceptance criteria.** *Given: The software finds photos on sites not belonging to the user. When: The user clicks “not mine”. Then: A report to get that photo removed will be sent to the site.*



User Stories

- User Story.** *As a developer, I want there to be facial verification before the service is used so that only the owner of the face can remove their images.*
- Acceptance criteria.** *Given: A user is looking to find images associated with their face. When: Their face is scanned. Then: It will only find images associated with that facial signature.*
- User Story.** *As a developer, I want to give the option to automatically scan for a users images so that videos and images of them that have clearly been altered can be automatically reported.*
- Acceptance criteria.** *Given: A user has chosen to automatically report images When: An altered video showing their face is found Then: a report will automatically be sent to the site to remove this.*

BUDGET

40%

UX RESEARCH

20%

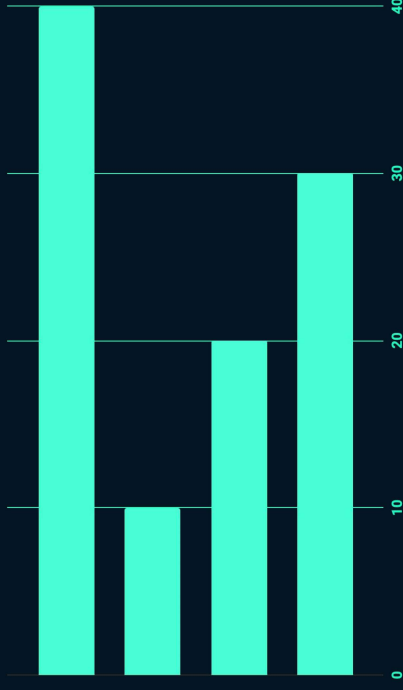
PROGRAMMING

10%

DATABASE

30%

WEB DESIGN



OUR GOALS



USABILITY

A simple web application that is accessible from any device that allows user to set up an account for continuous use



AVAILABILITY

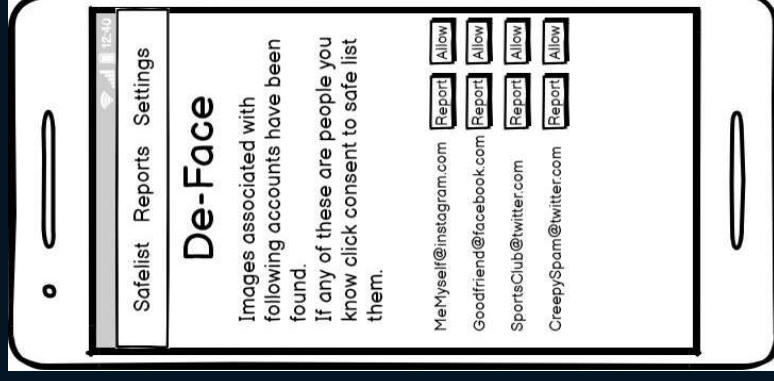
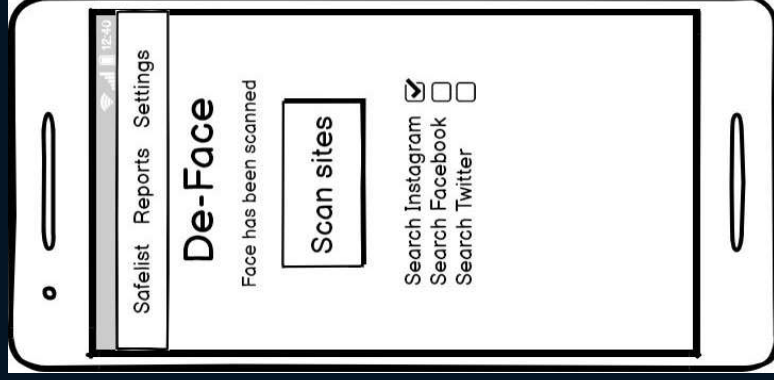
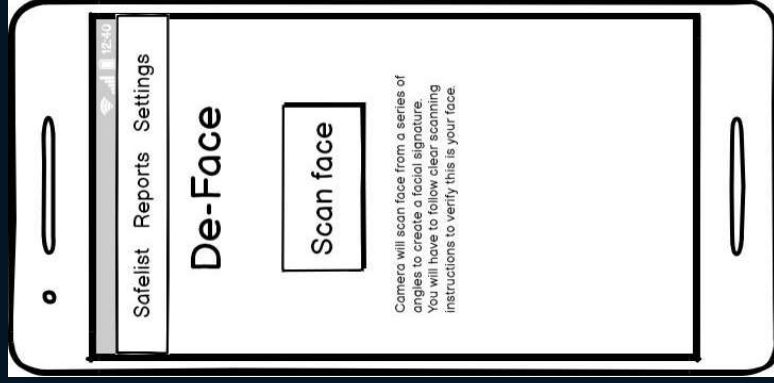
A free application available for anyone to use that can be applied to whatever sites they choose to scan through



EXPANSION

To gain credibility and trust from social networks so that we can work with them as a way of verifying and reporting images

Low fidelity Mobile Wireframe



PROJECT STAGES

STEP 1

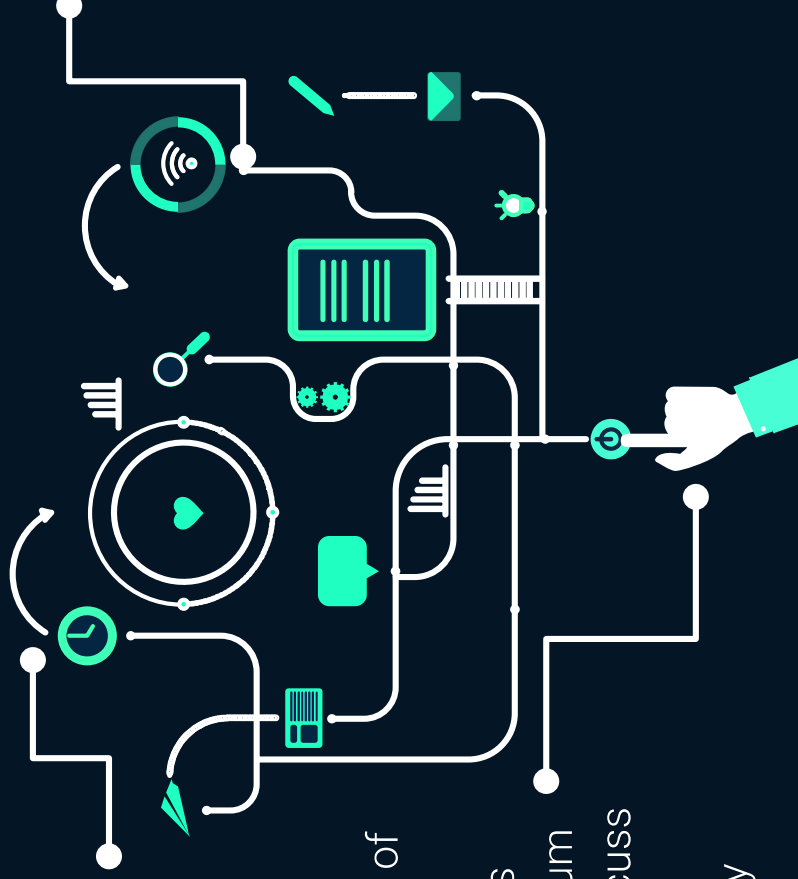
Planning: Team came together and generated ideas until we had a detailed for our project

STEP 2

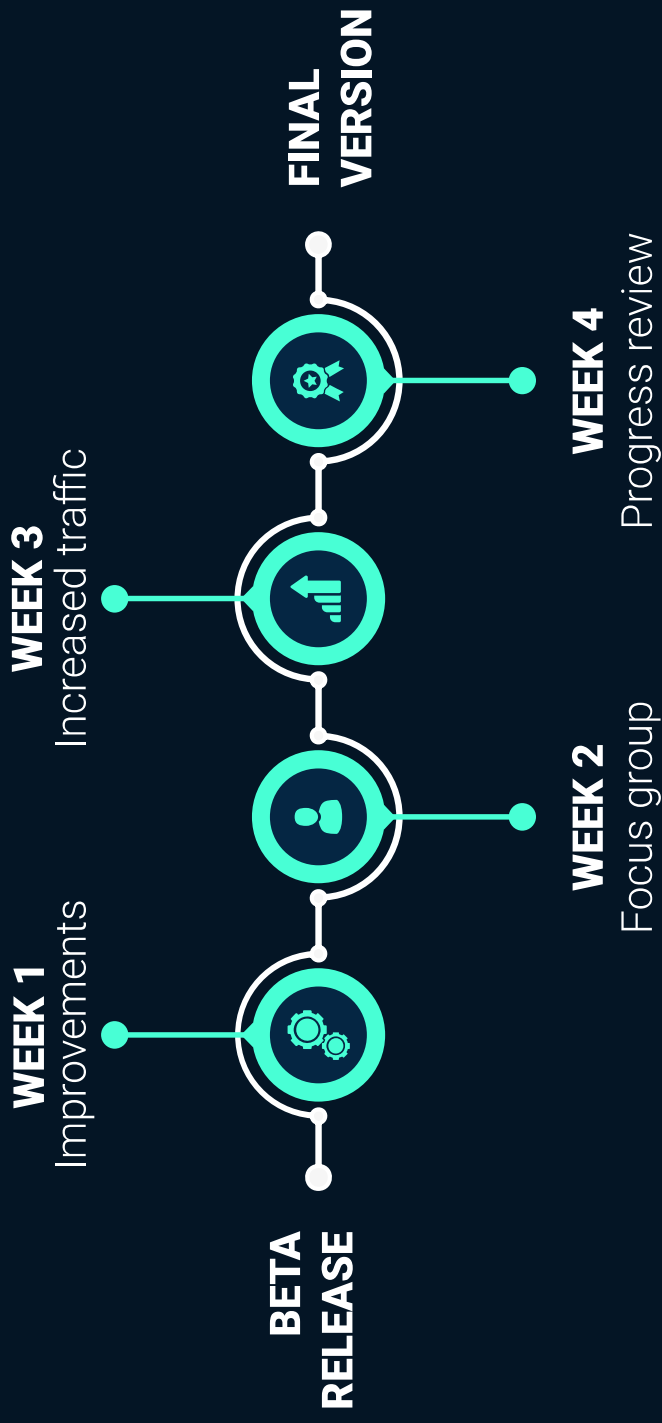
Designing: Iterative cycle of research, design and development of our ideas took place. Followed scrum meeting structure to discuss what had been done and need to be done each day

STEP 3

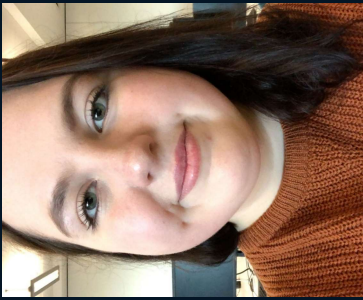
Testing: Ideas were tested ensure it would work in the user environment. Improvements and alterations made to our project until it was market ready.



OUR TIMELINE



THE TEAM



Jemma Molloy

Third year Computer Science and Mathematics Student in Maynooth University.



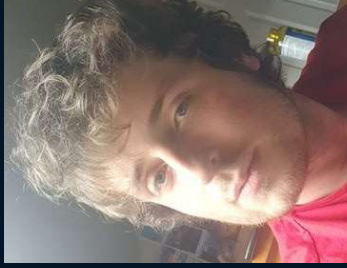
Muireann Carroll

Third year Computer Science and Software Engineering student from Maynooth University.



Amber Hafdioui

Third year Multimedia, Mobile and Web Development student at Maynooth University.



Aaron Clarke

Third year Computer Science and Software Engineering student at Maynooth University.



THANKS!

If you have any further questions do not hesitate to ask any of us:

aaronclarke980@gmail.com

amberhafdioui@outlook.com

jemmamolloy@gmail.com

muireann26carroll@gmail.com

CREDITS

- Presentation template by Slidesgo
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