

M1 Submission Group 20

Group Rankings

As a team we decided to use the suggested ranking criteria as a score where the higher score means they achieved more of the criteria ranking them higher. Below you can find the bullet points we used to calculate the score of each submission. As well as the table to show how much each member of the team scored for each criterion.

Mockups

1. Format:
 - follows an agreed format
 - similar enough to the agreed format
 - different to the agreed format
2. Link to concept:
 - links clearly and well to the team's app concept
 - fits well within the app
 - unclear link to the concept
 - different concept than agreed
3. Innovation of feature mocked up:
 - clearly innovative, original design
 - has elements of innovative design
 - very similar to existing solutions
 - different concept than agreed
4. How useful is the mockup are to get feedback:
 - Users are excited and enthusiastic to feedback on this
 - Have already got some useful feedback from the design
 - Not useful to get feedback from users
5. Usefulness of feature for the personas:
 - Feature is crucial to the usefulness of the app for the personas
 - Feature makes the app useful for the personas
 - Feature may not help the personas
6. The aesthetics of the mockup:
 - Is beautifully aesthetic
 - Looks good
 - Aesthetics could be improved
7. Suitability of AI (AI features/teams)
 - AI is applied appropriately to the feature
 - AI could be applied to the feature
 - AI could not work/be possible/achievable for this feature

Personas

1. believe-ability of personas:
 - uses real data from people, has real data
 - maybe based on a real person with some guesses
 - clearly contrived persona
2. Usefulness of the personas:
 - Will clearly help development direction in Kanban cards and discussion
 - Somewhat useful to help development
 - Generic so not useful
3. Details of relevant scenarios, assumptions and knowledge about the personas:
 - Very detailed breakdown of the persona needs that increases understanding
 - Somewhat useful detail of needs
 - Little detail

Kanban feature cards

1. Details level in Kanban cards:
 - Excellent and could be picked up by any team member
 - Good visual representation of work needed
 - Overly verbose/too short/unclear
2. References in Kanban cards:
 - Clear references to persona, feature, mockups
 - Some indirect link to project elements
 - unclear link to other elements
3. Practicalities in Kanban cards:
 - Tagged/shared in the agreed format/boards
 - Shared in the agreed format/boards
 - Not in the agreed format/boards

git commits

1. Commits messages:
 - Useful commit messages
 - Unclear, commit message
 - Blank commit messages
2. Commits Practicalities:
 - Evidence of commit to correct repo/agreed file(s), using SSH
 - Not in the agreed format/repo/file

Name	format	Link to concept	Innovation of feature	How useful is the mock-up to get feedback	Usefulness of feature for the personas	Aesthetics	believability of personas;	Usefulness of the persona	Details of relevant scenarios, assumptions and knowledge about the personas:	Details level in Kanban cards:	References in Kanban cards:	Commits messages:	Commits Practicalities:
Aadil	2	3	4	3	2	3	3	3	3	3	2	2	1
Ismail	2	3	2	1	2	1	2	3	3	2	1	3	1
Zeerak	2	3	2	1	2	1	2	3	3	1	1	1	0
Kris	2	2	4	1	3	2	2	3	3	2	2	1	1
Meghna	2	4	4	3	3	3	3	3	3	2	1	3	1
Simon	2	3	2	1	3	2	2	3	3	3	2	3	1
Lakhminder (N/A)	0	0	0	0	0	0	0	0	0	0	0	0	0

1. Meghna - 37

Meghna's work was a brilliant S1 submission. She displayed creativity and proper documentation of her work and showed her git commands and messages in the S1 submission. We all agreed she scored some high marks in the ranking table. However, her Kanban cards could have been more detailed on Gitlab.

2. Aadil – 34

Created a good submission for s1, scoring high scores for the ranking guide with good innovation, aesthetics and the persona is well linked to the mock-up using a real-life example of a businessperson. Also created good Kanban cards with labels to identify the feature and did an initial commit to the GitLab repository with SSH. We thought he could improve on adding more links to the features of the app to better link it to the persona.

3. Simon – 30

Simon's work was good. He displayed conventional website features on his submission. His persona was really good too and he said he understands git well so showed good git commands on his submission. His Kanban cards were very good too and he was quick on uploading them to git. His persona was really good too and can be used a lot for the development of the solution.

4. Kris – 28

Kris's work was very creative. We all agreed his mock-up was the best because he jumped straight into Figma and made his page in there whereas we did it on wireframes and paper. His documentation for S1 was quite simple and there wasn't any git code submission proof however we all saw that he did in fact upload to the repo on time and quite confidently.

5. Ismail – 26

Ismail's work was very well laid out. He scored high marks in terms of displaying and all the necessary criteria. However, he didn't show much creativity in his designs and a lot of his features are basic features that exist in other solutions. Nevertheless, they will be used in the solution, but he received a score of 26 for providing a high standard of work and excellent git commands to contribute to the team.

6. Zeerak – 22

Zeeraks work was completed well. He met the necessary criteria for each part of the s1 submission with adequate marks for each section whereas he could have achieved better marks if he showed more clear designs and committed to adding more detail in all his submissions overall. He also could have used more creativity for his design during the mock up stage. He did receive a lower mark for the commit submission as he got slightly confused about how to commit.

7. Lakhminder – N/A

(Away for a family emergency and did not submit any work for S1)

Project Concept – Community+

Introduction

Community+ is a dynamic web application designed to provide users with up-to-date crime alerts, community events and activities, emergency response information, and more. Our priority is to provide a user-friendly interface that is easy to navigate and use so anyone can access important information quickly and easily.

The home page features a dashboard displaying widgets such as the latest crime statistics and trends, personal notifications, a panic button etc.

One of the application's key features is the Crime Alerts page, which provides real-time information on crime from the police API and user submissions. Users can view the location of each crime incident on a map and participate in active discussions with other users. With real-time updates on crime incidents, users can respond quickly and appropriately to emerging situations.

Community awareness is a principal belief of our application, as reflected in our application name. Therefore, we have implemented a Community page where users can connect with one another to share information about crime issues, discuss local events (with a map view), and foster a sense of community safety. Users can create and join groups based on common interests and build relationships. With its emphasis on community building and engagement, the Community page is an essential tool for anyone looking to get involved and make a difference in their local area.

The Lost and Found page provides a centralized location for people to search for their lost belongings or return found items to their rightful owners and allows for easy communication between the finder and the owner. Our aim is to successfully connect people with their lost belongings and reduce the time and effort involved in searching for lost items.

The User Profile page gives users complete control over their user experience, allowing them to manage their personal information i.e. edit privacy settings, customize their profile, change their password, manage email notifications and more.

The Emergency Response Guide page provides users with valuable information and tips on how to respond in various emergency situations, such as fires, natural disasters, and medical emergencies. Users can access a panic button that provides them with immediate access to relevant emergency response information and tips for incidents of utmost urgency – saving valuable time and potentially saving lives.

Finally, the Emergency Stations page displays the nearest police stations based on the user's location or entered postcode/address, providing users with the information they need to get help in case of an emergency.

Overall, the Crime Alert Web app is a comprehensive tool that provides users with the information and resources they need to stay safe and informed in their communities.

Mock-up in Figma

Based on the S1 submissions we have decided to use Figma for our Mock-up as we believe it to be a professional tool and allowed us as a group to collaborate on the design of the application and keep it consistent across features and designs.

We have each created a feature based on our S1 submissions. Adding in the extra pages for the About Us, Help, Accessibility, FAQs and Terms and Conditions. However we do not have the Mock-up for the Lost & Found Page as it was assigned to Lakhminder who is away for a family emergency and will complete his Mock-up, Persona and Kanban Cards when he comes back following the advice given to us by our Tutor.

The screenshot shows the 'Community+' mobile application's home screen. At the top, there is a dark header bar with the text 'Home Page' on the left and three icons on the right: a document with a gear, a person, and a gear. Below the header is a purple navigation bar with white text containing the 'COMMUNITY+' logo and a menu with six items: Home, Crime Alerts, Emergency Stations, Community, Lost & Found, and Emergency Guide. To the right of the menu are three small icons: a document with a gear, a person, and a gear. The main content area has a light gray background. At the top left of this area, the text 'Welcome back user1!' is displayed. To the right of this text is a small gray square with a plus sign. Below this, the section 'Your Dashboard:' is labeled. On the left side of the dashboard, there is a box titled 'Crime stats in your area' containing a list of crime types with their counts: Theft (+2), Burglary (+4), Grand Theft Auto (0), Knife Crime (1), and a placeholder '.....'. To the right of this box are three smaller boxes: 'Personal notifications' (listing Account needs to be verified and You were tagged in ...), 'Crime alerts for your area' (listing New burglary, Car stolen at 4am, and Window smashed at 2am), and 'Events in your community' (listing Knife Crime Awareness workshop, Community BBQ, and Litter Run). At the bottom left of the main content area, the text 'Currently showing for location: Birmingham' is displayed. To the right of this text is a large orange circular button with the word 'PANIC' in white. A curved arrow points from the text 'In an **urgent** situation and don't know what to do?' towards the 'PANIC' button. At the very bottom of the screen is a blue footer bar with five links: About Us, FAQs, Help, Terms and Conditions, and Accessibility.

Home Page

COMMUNITY+

Home Crime Alerts Emergency Stations Community Lost & Found Emergency Guide

Welcome back user1!

Your Dashboard:

Crime stats in your area

- Theft +2
- Burglary +4
- Grand Theft Auto 0
- Knife Crime 1
-

Personal notifications

- Account needs to be verified
- You were tagged in ...

Crime alerts for your area

- New burglary
- Car stolen at 4am
- Window smashed at 2am

Events in your community

- Knife Crime Awareness workshop
- Community BBQ
- Litter Run

Currently showing for location: **Birmingham**

In an **urgent** situation and don't know what to do?

PANIC

About Us FAQs Help Terms and Conditions Accessibility

The screenshot displays the 'Community+' mobile application interface. At the top, there is a purple header bar with the text 'Crime Alerts' on the left and three icons on the right: a location pin, a user profile, and a gear. Below the header is a navigation bar with tabs: Home, Crime Alerts (which is selected), Emergency Stations, Community, Lost & Found, and Emergency Guide. The main content area features a map of Birmingham with several red flag icons indicating crime locations. A search bar is positioned at the top of the map. To the right of the map is a 'Notifications' sidebar containing six empty notification cards, a star icon, and a close (X) button. Below the map are four buttons: 'Add a crime', 'View crime history', 'Map filters', and 'Settings'. In the bottom right corner of the main content area, there are three buttons: 'Live discussion', 'View proof', and 'Report to moderators'. The bottom of the screen has a blue footer bar with links: 'About Us', 'FAQs', 'Help', 'Terms and Conditions', and 'Accessibility'.

Emergency Stations

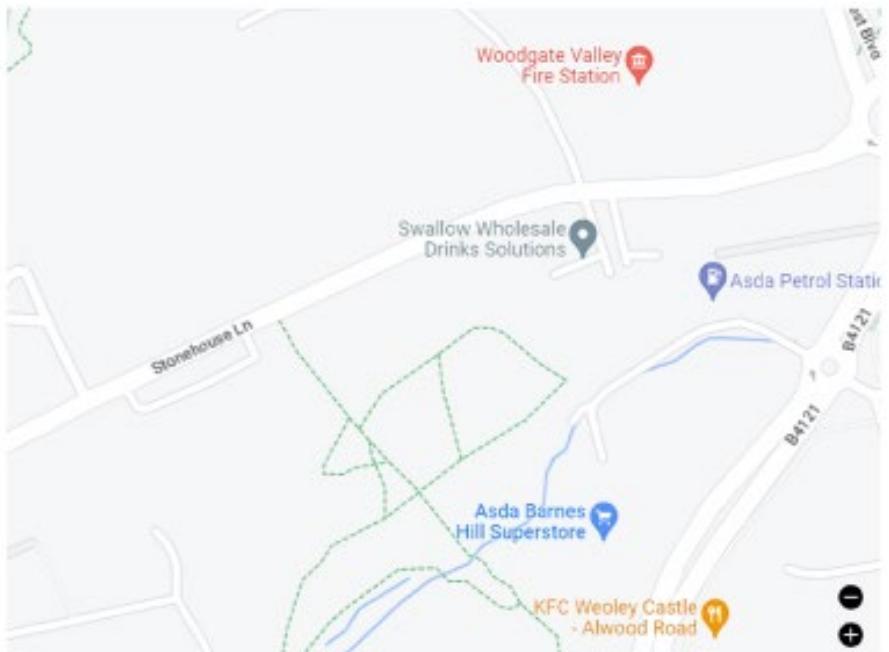
COMMUNITY+

Home Crime Alerts Emergency Stations Community Lost & Found Emergency Guide

Emergency Stations

Filters

Microphone Location Search



The map displays several locations: Woodgate Valley Fire Station (red pin), Swallow Wholesale Drinks Solutions (grey pin), Asda Petrol Station (blue pin), Asda Barnes Hill Superstore (blue pin), and KFC Weoley Castle - Alwood Road (orange pin). The map also shows roads like B4121, B4127, and Stonehouse Ln, along with green dashed lines indicating boundaries or paths.

About Us FAQs Help Terms and Conditions Accessibility

The screenshot displays the 'Community' section of the 'COMMUNITY+' mobile application. At the top, there is a purple header bar with the app's logo and navigation links for Home, Crime Alerts, Emergency Stations, Community, Lost & Found, and Emergency Guide. Below the header, a title 'Community Page' is centered. A section titled 'Upcoming Local Events for this week' follows, featuring three large, light-gray rectangular boxes with arrows for navigation. Below this, a 'Forum' section is shown with the heading 'Chat with your local community about events and local incidents'. On the left, a sidebar lists categories: Local Events, Incidents, Local Improvements, Home Improvement, and Job Finder. The main forum area contains two posts from users 'user1' and 'user2'. User 'user1' posted: 'What events are currently happening?' followed by 'There is a football tournament happening at the local park on Monday. You can sign up using this form.' User 'user2' responded: 'That event sounds amazing. It will be inviting to see new people in the local community.' At the bottom of the forum section, a message says 'I look forward to seeing you at the event too!' with a right-pointing arrow icon.

Community

COMMUNITY+

Home Crime Alerts Emergency Stations Community Lost & Found Emergency Guide

Community Page

Upcoming Local Events for this week

Local Events Incidents Local Improvements Home Improvement Job Finder

user1 What events are currently happening?
There is a football tournament happening at the local park on Monday.
You can sign up using this form.

user2 That event sounds amazing. It will be inviting to see new people in the local community.

I look forward to seeing you at the event too! ➤

Map of Events & Local Businesses

Selected Business
- Address
- Number
- Preference

Event 1
- Address
- Date & Time

Second Business
- Address
- Number

Event 2
- Address
- Date & Time

Third Business
- Address
- Number

Birmingham

About Us FAQs Help Terms and Conditions Accessibility

The screenshot shows the 'Emergency Guide' section of the COMMUNITY+ app. At the top, there's a purple header bar with the app's logo and navigation links for Home, Crime Alerts, Emergency Stations, Community, Lost & Found, and Emergency Guide. Below the header, the title 'Emergency Guide' is centered. To the left, a sidebar titled 'Our eMergency Guide' lists various emergency types with placeholder text. In the center, there's a search bar with a microphone and search icon, followed by a large orange circular button labeled 'PANIC'. To the right, a callout box says 'In an **urgent** situation and don't know what to do?'. Below these are two boxes: 'Type of Emergency 1' (with a rain and lightning icon) and 'Type of Emergency 2' (with a car accident icon). To the right of these is a vertical stack of cards: 'Most Urgent' (with a search bar), 'How to do CPR' (with a heart icon), and 'In event of a fire' (with a flame icon). At the bottom, there are sections for 'Should I call 999?' (with a flowchart diagram) and 'Useful Hotlines' (with a list of 10 placeholder numbers). The footer has links for About Us, FAQs, Help, Terms and Conditions, and Accessibility.

Emergency Guide

COMMUNITY+

Home Crime Alerts Emergency Stations Community Lost & Found Emergency Guide

Emergency Guide

Our eMergency Guide

In an **urgent** situation and don't know what to do?

PANIC

Type of Emergency 1

Type of Emergency 2

Most Urgent

How to do CPR

In event of a fire

Should I call 999?

Useful Hotlines

About Us FAQs Help Terms and Conditions Accessibility

User Profile

The screenshot shows the 'User Profile' section of the 'Community+' application. At the top, there is a purple header bar with the 'COMMUNITY+' logo and three icons: a gear, a person, and a circular arrow. Below the header is a navigation menu with links: Home, Crime Alerts, Emergency Stations, Community, Lost & Found, and Emergency Guide.

User Profile - David13

Public Profile

Name : David Smith
Age : 28
Occupation : Electrician
Community points : 267
Joined : 13/10/22

Bio : Hi I am David, I am new to the area and love to help my community

Actions

Verify User	Public / Private
Settings	Deactivate
Notifications On	Preferences

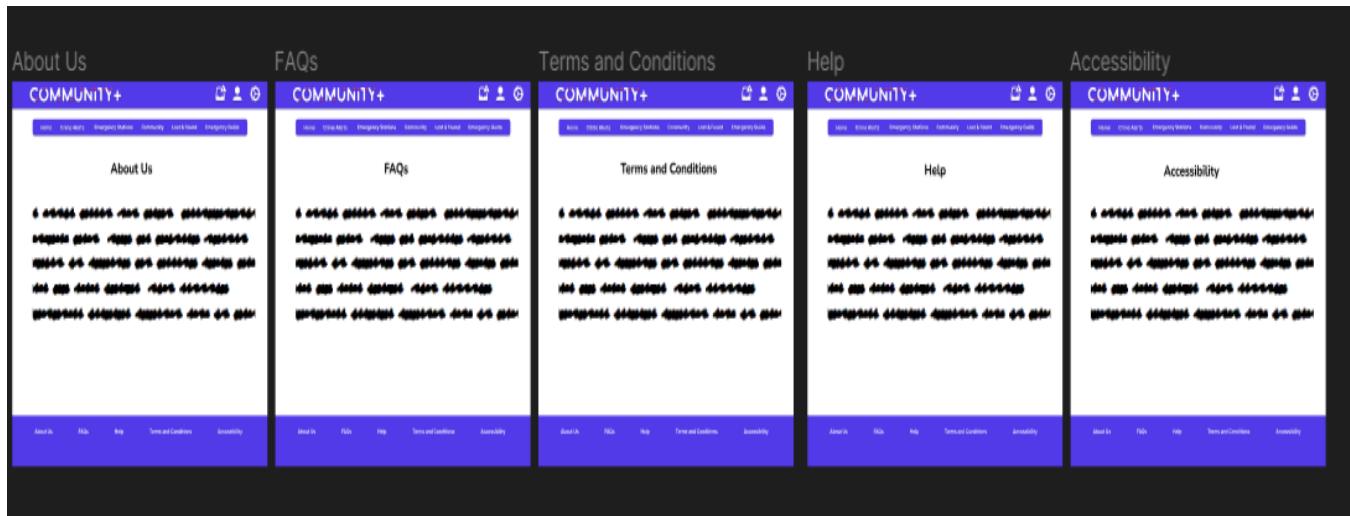
Edit:

User Name	Password
Occupation	Bio
Address	Email Address
Phone Number	Language

Footer

About Us | FAQ | Help | Terms and Conditions | Accessibility

Group 20 M1 Submission



Persona's

Created our Persona's using the template used by both Aadil and Meghna in S1 Submission.

Daniel Roberts

age: 39

residence: Birmingham

education: UK trained officer

occupation: Police Officer

marital status: Married



"A peaceful community makes everyone feel safer and is a pleasant feeling"

Daniel is a successful police officer who has served his community for the past 4 years. He hopes to work his way up the ranks in the police station and ensure people feel safe in his community.

Comfort With Technology

INTERNET



SOFTWARE



MOBILE APPS



SOCIAL NETWORK



Criteria For Success:

Motivated by the positive feedback his team receive from the locals when they take care of situations. Also believes communication is key to working together for a better future. Excited for how the web application will allow further information for his force when dealing with any issues in an area.

Needs

- A reliable app to pinpoint areas that are most affected
- An app that allows others to share information to help the police
- Guidance on where to focus on patrolling Which matters are more urgent than others

Values

- Reliability
- Trust
- Authority
- Respect
- Equality and Diversity

How will this person use the app

- Daniel believes that the police stations themselves as well as himself can benefit from the site by tactically placing officers in different areas to prevent crime or anti-social behaviour before they occur. This can lead to better strategies to preventing crime and target areas where there are more reports.

Fears

- Family being harmed
- Being injured badly himself
- Unable to help someone from a serious matter
- Responsible for someones death

John Smith

age: 69

residence: Birmingham, UK

education: MSc in Law and Finance

occupation: Retired Lawyer

marital status: Married with 3 kids



True peace is not merely the absence of tension: it is the presence of justice

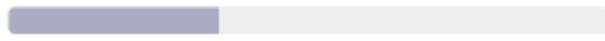
John is a retired lawyer who has spent most of his life practicing law and serving the community. He values his safety and the safety of his loved ones, which is why he is always looking for new tools to help him stay informed about potential risks and dangers in his neighborhood.

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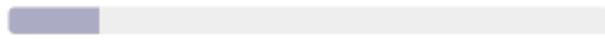
INTERNET



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Criteria For Success:

Staying informed about current events, contributing to his community, and maintaining a healthy and active lifestyle. Success for John may also involve continued personal growth, learning new things, and achieving his goals, such as staying safe while out and about.

Needs

- Safety concerns
- Community involvement
- Quick assistance
- Easy navigation
- Relevant information
- Trustworthy sources
- Privacy protection

How will this person use the app:

- John will use the app to feel safe and secure when he's out and about.
- He'll stay connected to his community through the app, and discover new local events and activities to attend with his grandkids.
- John can report any suspicious activity or crimes to the police through the app, helping to keep his neighborhood safe for his grandkids.

Values

- Safety first
- Community involvement
- Empathy

Fears

- Death
- Technology
- Loneliness

Libby Fowler

age: 37
residence: Coventry
education: BEng Civil Engineering
occupation: Civil engineering technician
marital status: Single mom with 2 kids



"It's always been me and my 2 girls against the world"

Home life is hectic for Libby as she is the sole breadwinner and responsible for all household matters. Due to her high-position technical job, she leaves for work early and arrives home late - putting her trust in her twin daughters, of age 13, to stay safe. Her family owns one car, however, she uses the train to reach her workplace.

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INTERNET



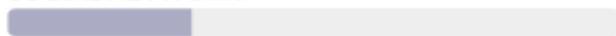
SOFTWARE



MOBILE APPS



SOCIAL NETWORK



Criteria For Success:

Libby is a driven worker and mother and values education highly. She wants to set an example to her children as a hard-working qualified woman, and believes one should not be just smart in school but also in the streets. Because of her busy work life, she has minimal time to spend teaching and safeguarding her kids.

Needs

- her & her children's safety
- an app that is easy-to-use, accessible & informative to kids (disregarding her own technical experience)

Values

- high level planning
- independency
- flexibility
- efficiency and speed

How they would use our site

- to connect with other like-minded parents to safeguard her & others' families
- to inform her children of certain dangers and how to deal with them

Fears

- travelling after it gets dark - more vulnerability as a woman
- not being able to attend to her children in an emergency
- lack of police vigilance in her area

Shaun Perkins

age: 34
residence: Birmingham, UK
education: Plumbing Course
occupation: Plumbing Business Owner
marital status: Single



Looking for a way to grow my Business

Sean is juggling many projects and priorities. He appreciates help from his vendors and employees. He wants a way to grow his business connections so that he is able to earn more money from local people.

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INTERNET



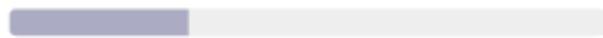
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Criteria For Success:

Want's a web application that he can advertise his business on the go and be able to reach out to people who need plumbing done in their homes as well as grow his workforce

Needs

- Tangible results
- Grow business
- Expand his workforce
- An application that works with his dyslexia
- More local business opportunities

How will this person use this app:

They will use the alerts and community pages to be able to identify and reach out to customers who require his services. Also find and meet other licensed plumbers who could join his business to expand his opportunities. Requiring accessibility features for his dyslexia.

Values

- Detailed planning
- Concrete expectations
- Community Values

Fears

- Failure
- Wasting money
- Not getting enough customers

Spencer Woods

age: 18
residence: London
education: University
occupation: Full time student
marital status: Single



"Only compare yourself to those who have less than you"

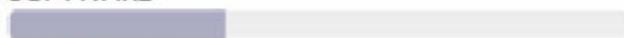
A new student who has just started university in his home city. Intends to continue life as it was before except in a new environment. Grew up in an area known to be dangerous.

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Criteria For Success:

Hopes to achieve a first class in his university degree and get into a world leading company earning a good amount of money to support a family in the future. He is motivated by his poor background growing up with a single parent.

Needs

- An app that can help him feel safe outside
- A straight forward and easy to use app
- An app that is secure and safe to use
- An app that can provide assistance when stuck
- An app that does not compromise privacy

How they would use our site

Growing up in an area known to be 'dangerous', he feels afraid sometimes to be out, especially after dark. With our site/app he can see which areas he should avoid especially when he finishes university late.

Fears

- Failing in life and school
- Being lonely
- Being in poverty or poor
- Being killed
- Losing family

Values

- The health and safety of family
- The health and safety of friends
- Excelling in education

Rachel Adeline

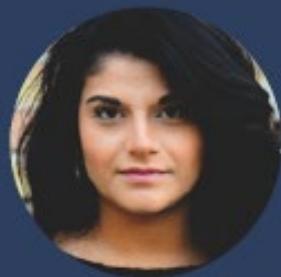
age: 29

residence: Birmingham

education: BSc Chemistry

occupation: Secondary school teacher

marital status: Married, kids



"Nurturing peoples futures since 2017"

A teacher at a school with a lot of young people who are involved in crime. She is often worried about her safety during her commute on the train to and from work. Due to her influence on young people she feels as though it is her duty to help nurture and keep them safe.

Comfort With Technology

INTERNET



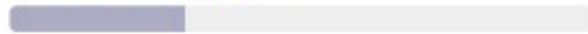
SOFTWARE



MOBILE APPS



SOCIAL NETWORK



Criteria For Success:

Not needing to worry about her safety while commuting and having the peace of mind that her students have access to resources to help them stay safe

Needs

- More information on criminal activity is easily accessible
- More police in less safe areas
- an intuitive way to communicate with the local community

Wants

- complete safety when on public transport
- young people in low-income areas to be given more support so they can avoid a life of crime
- a way for teachers to easily communicate with parents about safety awareness events.

Values

- organisation
- community events
- transparency
- communication
- safety

Fears

- that one of her students is a victim of a crime

CI Pipeline Setup

Here is the gitlab-ci.yml file and screenshots of each stage.

```
image: jhipster/jhipster:v7.9.3

variables:
  CI_IMG: "\"${CI_REGISTRY_IMAGE}:latest\""
  TP_URL: "${CI_PROJECT_NAMESPACE}.bham.team"
  TP_CONTACT: "${GITLAB_USER_EMAIL}"
cache:
  key: '$CI_COMMIT_REF_NAME'
  paths:
    - .maven/
stages:
  - check
  - build
  - test
  - analyze
  - package
  - release
  - publish
  - deploy
before_script:
  - export NG_CLI_ANALYTICS="false"
  - export MAVEN_USER_HOME=`pwd`/.maven

nohttp:
  stage: check
  script:
    - ./mvnw -ntp checkstyle:check -Dmaven.repo.local=$MAVEN_USER_HOME

maven-compile:
  stage: build
  script:
    - ./mvnw -ntp compile -P=webapp -Dmaven.repo.local=$MAVEN_USER_HOME
  artifacts:
    paths:
      - target/classes/
      - target/generated-sources/
    expire_in: 1 day

maven-package:
  stage: package
  script:
    - ./mvnw -ntp verify -Pprod -DskipTests -
  Dmaven.repo.local=$MAVEN_USER_HOME
  artifacts:
    paths:
      - target/*.jar
      - target/classes
    expire_in: 1 day
```

Group 20 M1 Submission

```
publish-docker:
  stage: publish
  services:
    - docker:dind
  variables:
    DOCKER_HOST: 'tcp://docker:2375'
    DOCKER_DRIVER: overlay2
    DOCKER_TLS_CERTDIR: ""
  dependencies:
    - maven-package
  script:
    - echo "pushing ${CI_REGISTRY_IMAGE} ${CI_REGISTRY_USER}"
${CI_REGISTRY_PASSWORD} ${CI_REGISTRY}"
    - ./mvnw -ntp -e -X jib:build -DskipTests -Pprod -
Djib.to.auth.username=${CI_REGISTRY_USER} -
Djib.to.auth.password=${CI_REGISTRY_PASSWORD} -
Djib.to.image=${CI_REGISTRY_IMAGE}:latest -
Dmaven.repo.local=$MAVEN_USER_HOME

#uncomment this once the $RSA $VM_USER@$VM are set in the repo - Setting ->
CI/CD -> variables
#$RSA should be a private key file, $VM_USER is the VM user name (e.g. root
or ec2) and $VM is the IP address of the Virtual Machine
#this assumes docker and SSH is installed on the $VM
deploy-git:
  image: alpine:latest
  stage: deploy
  when: on_success
  before_script:
    - chmod og= $RSA
    - apk update && apk add openssh-client
    - ssh -o StrictHostKeyChecking=no -i $RSA $VM_USER@$VM "docker compose
-f ~/team-project-deployment/src/main/docker/app.yml down || true"
    - ssh -o StrictHostKeyChecking=no -i $RSA $VM_USER@$VM "docker rm -f
$(docker ps -a -q) || true"
    - ssh -o StrictHostKeyChecking=no -i $RSA $VM_USER@$VM "docker volume
rm $(docker volume ls -q) || true"
    - ssh -o StrictHostKeyChecking=no -i $RSA $VM_USER@$VM "rm -rf ~/team-
project-deployment || true"
    - ssh -o StrictHostKeyChecking=no -i $RSA $VM_USER@$VM "docker login -u
$CI_REGISTRY_USER -p $CI_REGISTRY_PASSWORD $CI_REGISTRY"
    - ssh -o StrictHostKeyChecking=no -i $RSA $VM_USER@$VM "docker pull
${CI_REGISTRY_IMAGE}:latest"
  script:
    - scp -o StrictHostKeyChecking=no -i $RSA -r . $VM_USER@$VM:~/team-
project-deployment
    - ssh -o StrictHostKeyChecking=no -i $RSA $VM_USER@$VM "sed -i
'5s|teamproject|$CI_IMG|' ~/team-project-
deployment/src/main/docker/app.yml"
    - ssh -o StrictHostKeyChecking=no -i $RSA $VM_USER@$VM "docker compose
-f ~/team-project-deployment/src/main/docker/app.yml up -d"
```

Group 20 M1 Submission

nohttp

Search job log Search icon Copy icon Up icon Down icon

```

ster:v7.9.3 with digest jhipster/jhipster@sha256:ed77fffd9da0f0d60176cff123fe5f19a6d3af8b4e85b6736a913a8fa5abe
ab4f ...
27 $ export NG_CLI_ANALYTICS="false"
28 $ export MAVEN_USER_HOME='pwd'/.maven
29 $ ./mvnw -ntp checkstyle:check -Dmaven.repo.local=$MAVEN_USER_HOME
30 [INFO] Scanning for projects...
31 [INFO]
32 [INFO] -----< uk.ac.bham.teamproject:teamproject >-----
33 [INFO] Building Teamproject 0.0.1-SNAPSHOT
34 [INFO] ----- [ jar ] -----
35 [INFO]
36 [INFO] --- maven-checkstyle-plugin:3.1.2:check (default-cli) @ teamproject ---
37 [INFO] You have 0 Checkstyle violations.
38 [INFO] -----
39 [INFO] BUILD SUCCESS
40 [INFO] -----
41 [INFO] Total time: 9.286 s
42 [INFO] Finished at: 2023-02-20T13:13:07Z
43 [INFO] -----
45 Saving cache for successful job
46 Creating cache main-protected...
47 .maven/: found 1917 matching artifact files and directories
48 No URL provided, cache will not be uploaded to shared cache server. Cache will be stored only locally.
49 Created cache
51 Cleaning up project directory and file based variables
53 Job succeeded

```

00:04 00:01

Duration: 1 minute 16 seconds
Finished: 1 day ago
Queued: 2 seconds
Timeout: 1h (from project)
Runner: #81 (qBzpj7c) Personal runner

Commit [2e8e3631](#) Copy icon
Testing CI

Pipeline #1396 for main Copy icon

check

→ Green circle icon nohttp

maven-compile

Search job log Search icon Copy icon Up icon Down icon

```

-Djava.security.egd=file:/dev/./urandom -Xmx1g
71 [INFO]
72 [INFO] --- properties-maven-plugin:1.1.0:read-project-properties (default) @ teamproject ---
73 [INFO]
74 [INFO] --- maven-compiler-plugin:3.10.1:compile (default-compile) @ teamproject ---
75 [INFO] Changes detected - recompiling the module!
76 [INFO] Compiling 67 source files to /builds/team-projects-2022-23/team20-22/target/classes
77 [INFO] -----
78 [INFO] BUILD SUCCESS
79 [INFO] -----
80 [INFO] Total time: 22.351 s
81 [INFO] Finished at: 2023-02-20T13:13:50Z
82 [INFO] -----
84 Saving cache for successful job
85 Creating cache main-protected...
86 .maven/: found 4858 matching artifact files and directories
87 No URL provided, cache will not be uploaded to shared cache server. Cache will be stored only locally.
88 Created cache
90 Uploading artifacts for successful job
91 Uploading artifacts...
92 target/classes/: found 123 matching artifact files and directories
93 target/generated-sources/: found 10 matching artifact files and directories
94 Uploading artifacts as "archive" to coordinator... 201 Created id=4581 responseStatus=201 Created token=64_q8sCv
96 Cleaning up project directory and file based variables
98 Job succeeded

```

00:10 00:02 00:01

Duration: 48 seconds
Finished: 1 day ago
Queued: 2 seconds
Timeout: 1h (from project)
Runner: #81 (qBzpj7c) Personal runner

Job artifacts
The artifacts were removed 2 hours ago Question mark icon

Commit [2e8e3631](#) Copy icon
Testing CI

Pipeline #1396 for main Copy icon

build

→ Green circle icon maven-compile

Group 20 M1 Submission

```
Search job log
```

```
250 [INFO] Skipping Jacoco execution due to missing execution data file.
251 [INFO]
252 [INFO] --- maven-checkstyle-plugin:3.1.2:check (default) @ teamproject ---
253 [INFO] You have 0 Checkstyle violations.
254 [INFO]
255 [INFO] --- maven-failsafe-plugin:3.0.0-M7:verify (verify) @ teamproject ---
256 [INFO] Tests are skipped.
257 [INFO] -----
258 [INFO] BUILD SUCCESS
259 [INFO] -----
260 [INFO] Total time: 05:28 min
261 [INFO] Finished at: 2023-02-20T13:19:54Z
262 [INFO] -----
264 Saving cache for successful job
265 Creating cache main-protected...
266 .maven/: found 6049 matching artifact files and directories
267 No URL provided, cache will not be uploaded to shared cache server. Cache will be stored only locally.
268 Created cache
270 Uploading artifacts for successful job
271 Uploading artifacts...
272 target/*.jar: found 1 matching artifact files and directories
273 target/classes: found 204 matching artifact files and directories
274 Uploading artifacts as "archive" to coordinator... 201 Created id=4582 responseStatus=201 Created token=64_RrpGh
276 Cleaning up project directory and file based variables
278 Job succeeded
```

maven-package trash refresh

Duration: 6 minutes 13 seconds
Finished: 1 day ago
Queued: 3 seconds
Timeout: 1h (from project) ?
Runner: #81 (qBzpjn7c) Personal runner

Job artifacts
The artifacts were removed 2 hours ago ?

Commit [ze8e3631](#) diff
Testing CI

Pipeline #1396 for main diff
package

→ **maven-package**

```
1938 [DEBUG] TIMED Preparing manifest list pushers : 0.292 ms
1939 [DEBUG] TIMED Building and pushing image : 14638.724 ms
1940 [INFO]
1941 [INFO] Built and pushed image as git.cs.bham.ac.uk:5050/team-projects-2022-23/team20-22
1942 [INFO]
1943 [INFO] A new version of jib-maven-plugin (3.3.1) is available (currently using 3.2.1). Update your build configuration to use the latest features and fixes!
1944 [INFO] https://github.com/GoogleContainerTools/jib/blob/master/jib-maven-plugin/CHANGELOG.md
1945 [INFO]
1946 [INFO] Please see https://github.com/GoogleContainerTools/jib/blob/master/docs/privacy.md for info on disabling this update check.
1947 [INFO]
1948 [INFO]
1949 [INFO] -----
1950 [INFO] BUILD SUCCESS
1951 [INFO] -----
1952 [INFO] Total time: 22.369 s
1953 [INFO] Finished at: 2023-02-20T13:21:18Z
1954 [INFO] -----
1956 Saving cache for successful job
1957 Creating cache main-protected...
1958 .maven/: found 6627 matching artifact files and directories
1959 No URL provided, cache will not be uploaded to shared cache server. Cache will be stored only locally.
1960 Created cache
1962 Cleaning up project directory and file based variables
1964 Job succeeded
```

publish-docker trash refresh

Duration: 1 minute 8 seconds
Finished: 1 day ago
Queued: 3 seconds
Timeout: 1h (from project) ?
Runner: #81 (qBzpjn7c) Personal runner

Commit [ze8e3631](#) diff
Testing CI

Pipeline #1396 for main diff
publish

→ **publish-docker**

Group 20 M1 Submission

The screenshot shows a CI pipeline interface. On the left is a terminal-like window displaying a log of build steps. On the right is a summary card for the pipeline.

Job Log (Terminal View):

```
277 27c45a07ef3f Extracting [=====] 1306/1306
300 27c45a07ef3f Pull complete
301 2b6113fb2a7b Extracting [=====] 200B/200B
302 2b6113fb2a7b Extracting [=====] 200B/200B
303 2b6113fb2a7b Pull complete
304 144293d36fee Extracting [=====] 4.701kB/4.701kB
305 144293d36fee Extracting [=====] 4.701kB/4.701kB
306 144293d36fee Pull complete
307 teamproject-postgresql Pulled
308 Network docker_default Creating
309 Network docker_default Created
310 Container docker-teamproject-postgresql-1 Creating
311 Container docker-teamproject-app-1 Creating
312 Container docker-teamproject-app-1 Created
313 Container docker-teamproject-postgresql-1 Created
314 Container docker-teamproject-postgresql-1 Starting
315 Container docker-teamproject-app-1 Starting
316 Container docker-teamproject-postgresql-1 Started
317 Container docker-teamproject-app-1 Started
319 Saving cache for successful job 00:01
320 Creating cache main-protected...
321 .maven/: found 6627 matching artifact files and directories
322 Archive is up to date!
323 Created cache
325 Cleaning up project directory and file based variables 00:01
327 Job succeeded
```

Pipeline Summary:

- deploy-git** (Status: Success)
- Duration:** 1 minute 1 second
- Finished:** 1 day ago
- Queued:** 1 second
- Timeout:** 1h (from project) (with a question mark icon)
- Runner:** #81 (qBzpj7c) Personal runner

Commit: 2e8e3631 (with a copy icon)

Testing CI

Pipeline #1396 for main (with a copy icon)

deploy (selected in dropdown)

Stages:

- **deploy-git** (Success)
- ② **deploy-git** (Failure)
- ② **deploy-git** (Failure)
- ② **deploy-git** (Failure)
- ② **deploy-git** (Failure)

Meeting Diary

We have held multiple meetings discussing our ideas and concepts for the project. Making notes in a note taking application recording attendance, date, subject, discussion, notes on meetings and tasks to complete.

Meeting Diary - Team 20

[Group Meeting 1 - 06/02/2023](#)

[Tutor Meeting 1 - 09/02/2023](#)

[Tutor Meeting 2 - 13/02/2023](#)

[Group Meeting 2 - 13/02/2023](#)

[Tutor Meeting 3 - 20/02/2023](#)

[Group Meeting 3 - 20/02/2023](#)

Group Meeting 1 - 06/02/2023

Introduction to teammates/Register:

Aadil, Ismail, Zeerak, Simon, Meghna, Kris, Lakhminder(absent due to family emergency)

Main subject of the meeting: Brainstorming/Deciding on an idea

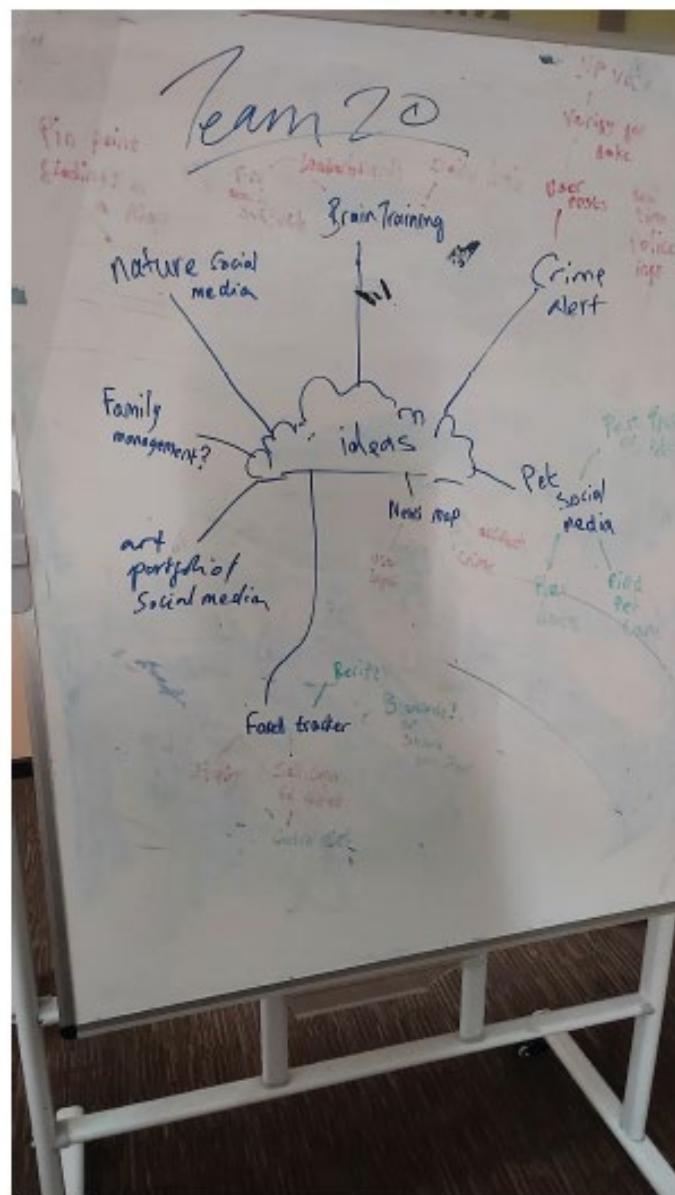
Accessibility Evangelist: Ismail

Listing Ideas and comments:

- an app that matches up language learners for conversation and practise - Can get quite complicated
- nature foraging website - Sharing nature with others on a forum.
- personal finance tracker - too common...
- groceries/calorie app - Scan items and keep a virtual fridge, reciepes and calorie information etc.
- digital CV/Resume App - Allow you to produce your CV and guide you
- Crime web Alert app - Alerting communities and locals of crime in their area
- Invoicing Web App - Making writing invoices easier

- Braintraining app - Minigames to help people and train their mind. Leaderboards and competition can be added

Brainstorm:



Ideas we like:

- Crime Alert App
- Brainstorming

Potentials on Crime Alert App:

- An app which alerts about crime from police api and from users. You can follow either and area or specific police station. People can see when the alert was made by user or by police.
- A map with different markers which mark where the incidents happened.
- A live discussion, where people can talk about what happened.
- A page which directs to nearest police station by location or entering a postcode/address
- Police stations can have their own separate account and post what they like(?)
- Ability to view crime statistics and trends in a specific area.
- A panic button to quickly notify police in case of emergency.
- Option to provide anonymous tips to police regarding ongoing investigations.
- A lost and found section where people can post about lost or found items.
- A rewards system for people who provide useful information leading to the arrest of a criminal.
- Upvotes and downvotes for user posted incidents

Potentials on Braintraining:

- Website provides 4-5 minigames for people.
- People can earn points for each game and people with the most points get on the leaderboard.
- You can have friend list and chat with friends.

- You can invite friends and compete between each other.
- People can bet their points and the game winner takes it all.
- You can offer more points for completing certain challenges or milestones, such as reaching a certain score in a minigame, or playing for a certain number of days in a row.
- You can also offer bonus points for referring new users to the website, or for completing a set of minigames in a specific order.
- You can offer limited-time point bonuses for playing during special events or holidays.
- Offer additional points for completing surveys or sharing feedback about the website.

Not sure on which one is the one to go for but narrowed it down to two.

Next tutor meeting: 09/02/2023

Next group meeting: 13/02/2023

Tutor Meeting 1 - 09/02/2023

Register:

Aadil, Ismail, Zeerak, Simon, Meghna(ill), Kris, Lakhminder(absent due to family emergency)

Main subject of the meeting: Finalising the idea

- Met our tutor Chrisitan
- Explained Lakhminder's absense
- Asked him about which idea is better

Verdict:

- Braintraining is very common. Lots of mini games like it people have on their phone already.
- Crime Alert, better idea, not too many apps, only a few like it. Potential to grow and be worldwide and can enforce better communities. Only a couple of apps like this: Nextdoor and Citizen.

Further Notes:

- Uses Figma for the final mockup, better variety and looks more professional
- Do mockup on paper first and Balsamiq Wireframes if possible
- Do a calendar of timings and who does who
- 1 persona per person
- Crime alert can sell more than braintraining, braintraining is quite common.
- Both ideas (crime and brain training) are great ideas
- Have to come up with a way to counter fake news for crime alert
- Could verify news with evidence
- Need to consider confidentiality
- Maybe have users verify themselves when making an account? (Helps stop fake news and bots)
- When coming up with ideas, could use features from existing apps
- Idea suggestion: a map that pinpoints incidences or illness reports on public transport

To do by next session: Mockups of pages on paper at least.

After meeting agreements:

Home: A dashboard displaying the latest crime alerts, crime statistics and trends, community events and activities, and personal notifications. The home page would also include quick links to the other sections of the site, such as the Crime Alerts,

Community & Lost & Found, User Profile, and About Us pages. We can do a widget system on the home page too.

Crime Alerts: A page showing real-time crime alerts from the police API and user submissions. The page would include a map view that marks the location of each crime incident, allowing users to easily visualize the crime activity in their area. The page would also include a live discussion section, where users can share information and discuss the crime incidents.

Community & Lost & Found (split into two different pages): A page that combines the functionality of both the Community and Lost & Found pages. The page would allow users to post about local events, lost and found items, and other community-related topics, with a map view. Users can also search and view posts made by others in their area.

User Profile: A page where users can manage their personal information, customize their profile, change their password, and manage email notifications. This page would give users complete control over their user experience, allowing them to tailor the site to their preferences and needs.

About Us: Information about the Crime Alert Web app, its mission, and team. This page would provide users with background information on the site, its goals, and the people behind it.

Emergency Response Guide: A page providing users with information and tips on how to respond in various emergency situations, such as fires, natural disasters, and medical emergencies. The page would include a section for each type of emergency, with information on what to do, what to bring, and who to call. It would also include a panic button that users can activate in the event of an emergency, which would provide them with immediate access to the relevant emergency response information and tips.

Police Stations: A page that displays the nearest police stations based on the user's location or entered postcode/address. The page would also include information

about each police station, such as its address, phone number, and hours of operation. This page would make it easy for users to find the police station nearest to them and get the help they need in case of an emergency.

Page allocation for mockups:

Ismail - Home

Kris - Crime Alert

Aadil - Community

Zeerak - User Profile

Meghna - Emergency Response Page Simon - Police Stations

Lakhminder - L&F

About Us

Personas for everyone:

Ismail - Police Officer

Kris - Elderly

Aadil - Business Owner

Zeerak - Secondary School Teacher

Meghna - Mother

Simon - Student 18+

Lakhminder - n/a

Next tutor meeting: 13/02/2023

Next group meeting: 13/02/2023

Tutor Meeting 2 - 13/02/2023

Register:

Aadil, Ismail, Zeerak, Simon, Meghna, Kris, Lakhminder(absent due to family emergency)

Main subject of the meeting: Showing mockups and personas. Sharing our ideas with Chrisitan

Notes:

- Personas are very good, keep them different from each other with potential different user access
- Think about how your app will be used by users
- Pleased with the pages. Explained that everyone will be responsible for a page and each page will essentially have sub features
- Need to think about the confidentiality of the app too, how to hide anything unpleasant and how we are going to implement any identity authentication.
- Virtual Machine and Git should be out soon.
- We are ready for S1 submission 😊
- Need to finish any touches on mockups and git commit them when we can.
- Figma is the best thing to do M1 mockups.

Next tutor meeting: 20/02/2023

Next group meeting: 13/02/2023

Group Meeting 2 - 13/02/2023

Main subject of the meeting: Setting grounds and details for the web app. Finalising things like layout, features and name.

Register:

Aadil, Ismail, Zeerak, Simon, Meghna, Kris, Lakhminder (absent due to family emergency)

Decided format for the navigation bar:

1. Home
2. Crime Alerts
3. Emergency Stations (name changed)
4. Community
5. Lost and Found
6. Emergency Guide
7. Profile
8. About Us (decided it will go on the bottom)

Decided standard layout:

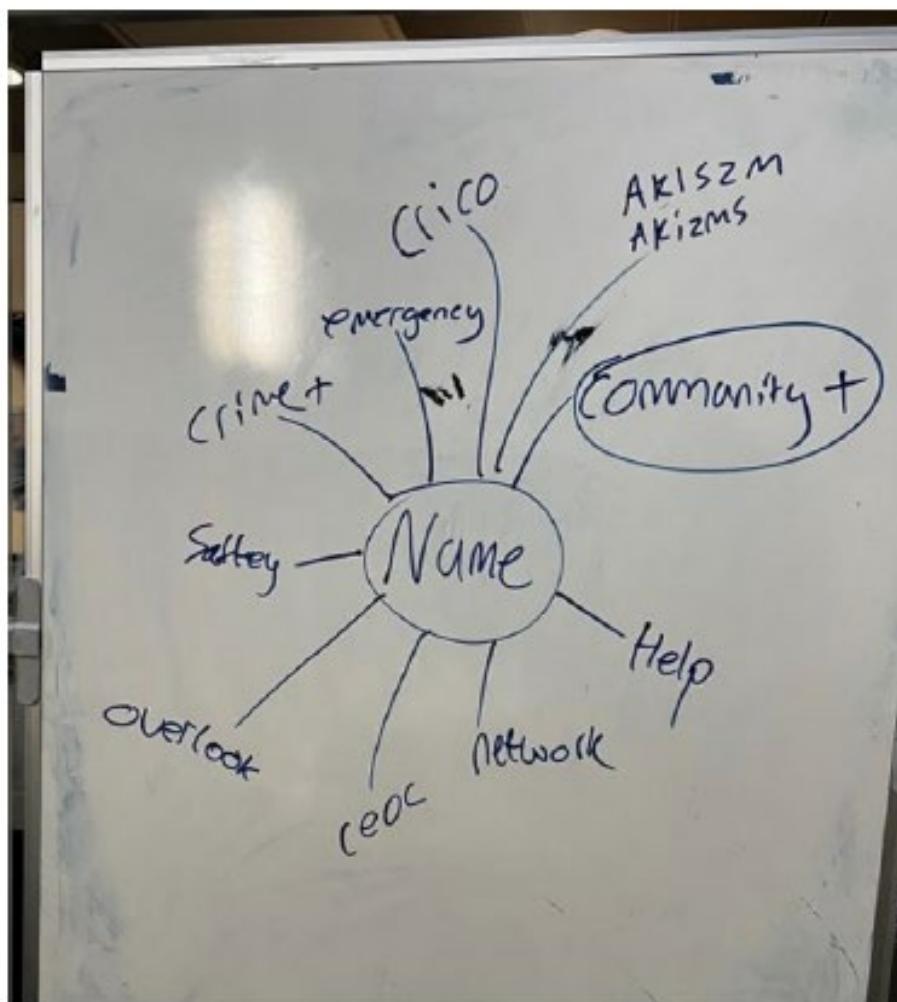
- Home layout will have Logo, Name, Nav Bar and widgets below
- Other pages will have the Bar at the top and the remaining page at the bottom below it. Logo can be smaller in the corner of the bar

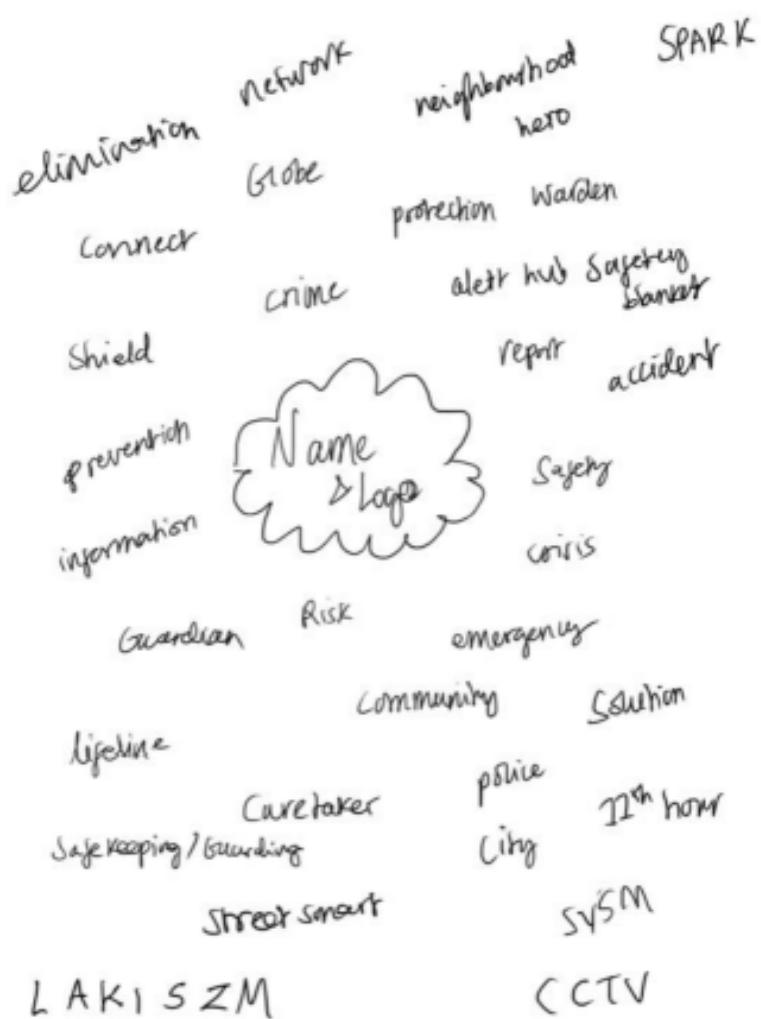
Name Ideas:

- Can combine our initials for a name?
- VigilantX
- SafeCity
- AlertMe
- CrimeClue
- SafeEye
- VigilantEye
- VigilEyes (vigilante + Eyes)
- GuardDog

- EyeSpy
- EyeOnCrime
- EagleEye
- TrackDown
- StreetEye

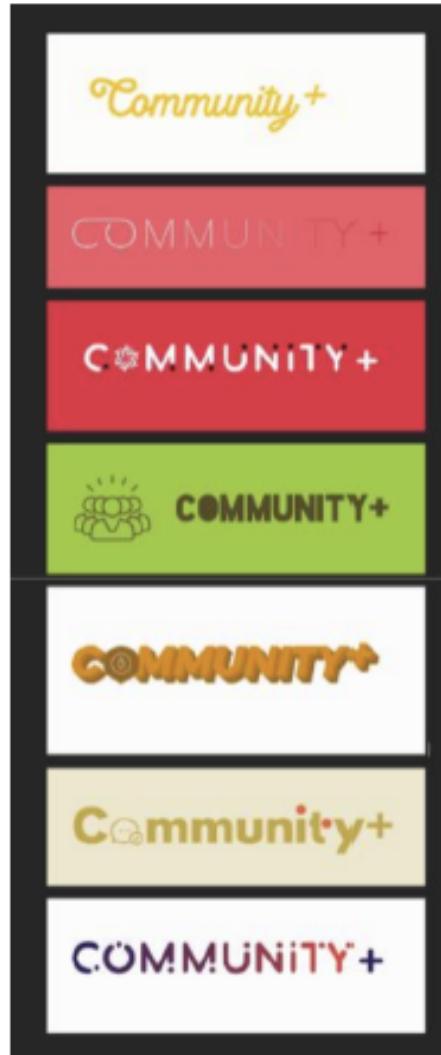
Brainstorms and Moodboard/List:





Name we decided on: Community+ (Community Plus)

Logo Ideas:



- All agreed on the bottom one.
- All agreed on using Meghan and Aadil's template for the Persona (they used the same one)
- Agreed content of pages on PDF on Teams

Next Meeting: All to have made Figma mockups to show, Personas on the same format, S1 ranking and uploaded necessary documents to gitlab.

Next tutor meeting: 20/02/2023

Next group meeting: 20/02/2023

Tutor Meeting 3 - 20/02/2023

Register:

Aadil, Ismail, Zeerak, Simon, Meghna, Kris, Lakhminder(absent due to family emergency)

Main subject of the meeting: Showing Figma mockups and agreed persona templates. Sharing our ideas with Chrisitan and recieving feedback

Notes:

- Figma mockups look very professional and aesthetically pleasing
- Very well co-ordinated with one another
- Just be wary of giving us too much to do. Potential way of tackling that is to decide on some pages that can be dismissed if it gets too much.
- In terms of Lakhminder, N/A on his S1 Ranking
- Persona template is very good
- We do not need to include Lifestyle as a whole section on the persona
- Better to have it in the bio and keep it concise
- Need to decide on headings for persona so we have coherent personas
- Format of S1 Ranking can be anything as long as you provide it

Tasks we need to do before M1:

- Ensure all personas are coherent
- Export Figmas mockups
- S1 Rankings
- CI Pipeline

- Overall nearly ready for M1 Submission just need to brush up on a few things

Ismail responsible for meeting diary.

Next tutor meeting: 27/02/2023

Next group meeting: 20/02/2023

Group Meeting 3 - 20/02/2023

Register:

Aadil, Ismail, Zeerak, Simon, Meghna, Kris, Lakhminder(absent due to family emergency)

Main subject of the meeting: Declaring persona headings, S1 Rankings, Kanban Cards, CI Pipeline Test and plans for submission

Notes:

- All agreed that we liked the personas with the heading "How this person will use the app" and it was vital to keep it in the persona
- Needs was kept in the persona headings too
- We established the following headings:
 - Criteria for success
 - How will this person use the app
 - Needs
 - Values
 - Fears

- Established a ranking matrix to rank everyone's work against the S1 Ranking Guide. Members' work was then ranked in order of the scores
- We then wrote <100 words about everyone's work.

Kanban cards were looked over and edited ready for M1 submission.

The concept was written up by the group explaining the purpose of our solution and its features and who its target audience is.

Meeting Diary will be exported to a PDF ready for M1 Submission.

Aadil agreed to be responsible to upload M1 submission for the rest of the team

Next tutor meeting: 27/02/2023

Next group meeting: 27/02/2023

S2 task allocation & planning

profile page



Assigned to Zeerak Parvez.

Edited just now by Aadil Ahmad



Create merge request ▾

Drag your designs here or [click to upload](#).

Tasks 5

Add ▾

^

Create Profile Form

⋮

Create Query to edit and delete the user

⋮

Create the frontend design

⋮

Create an anonymous feature

⋮

Create a verification feature with API

⋮

Crime alert



Assigned to Kristupas Jakubonis.

Edited just now by Aadil Ahmad



Create merge request ▾

Drag your designs here or [click to upload](#).

Tasks 11

Add ▾

^

Map View: A real-time map view of crime alerts in the area, using the latest police API data and user submissions.

⋮

Users should be able to zoom in and out of the map.

⋮

Users should be able select a specific alert to view more information.

⋮

Alert Filters: A set of filters that allow users to view crime alerts by type (e.g. theft, assault, etc.), date, and location.

⋮

Users should be able to select multiple filters at once, and the map view should update accordingly.

Home Page



Assigned to Mohammed Mahroof.

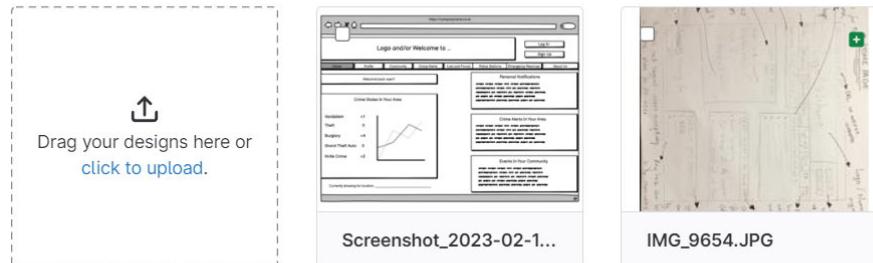
Edited just now by Aadil Ahmad



Create merge request ▾

Designs Showing latest version ▾

Select all Archive selected Upload designs



Tasks 9

Add ▾

Added navigation bar

⋮

Check navigation bar works for all pages

⋮

Uploaded logo/name

⋮

Emergency Stations



Assigned to Simon Luong.

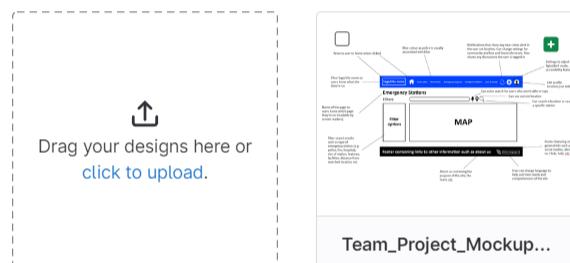
Edited just now by Aadil Ahmad



Create merge request ▾

Designs Showing latest version ▾

Select all Archive selected Upload designs



Tasks 5

Add ▾

Map pin pointing all the relevant emergency stations such as police, hospital, fire. Users can scroll, drag, zoom so that they can navigate their way to the location.

⋮

Search bar allowing users to search a location or a specific station, so that users can quickly and easily navigate to their desired area

⋮

Filters to aid users in finding an emergency station. Filters include type of emergency station, distance from current location, features, facilities, etc.

⋮

Emergency response guide



Assigned to Meghna Jagadeesh.

Edited just now by Aadil Ahmad



Create merge request

↑ Drag your designs here or [click to upload](#).

Tasks 8

Add ^

- Make search bar to search for relevant emergency
- (optional) Give search bar auto-fill function
- After clicking on the desired search, page should redirect to relevant sub-section of the page for more information
- Underneath/on the side of the page should be a button to go back to the top of the page

Panic Button



Assigned to Meghna Jagdeesh.

Edited just now by Aadil Ahmad



Create merge request

↑ Drag your designs here or [click to upload](#).

Tasks 3

Add ^

- Create button with design that stands out (bright colour, clear font etc.)
- Upon pressing button, user will be redirected to option to choose from the most urgent emergencies
- If relevant emergency not visible, add another option for users to be search for relevant emergency

Create a horizontal slideshow of local events with pictures and dates

Assigned to Aadil Ahmad.

Edited just now by Aadil Ahmad



Create merge request



Designs Showing latest version ▾

Select all

Archive selected

Upload designs

Drag your designs here or [click to upload](#).

design_167656512235...

Tasks 3

Add ▾



- Create a query in the database to get the events for a week
- Add pictures to the slideshow depending on the type of event
- create the animation and design of the slideshow in CSS

Create a forum section that connects to and allows users to talk in selected chats

Assigned to Aadil Ahmad

Edited just now by Aadil Ahmad



Create merge request



Tasks 5

Add ▾



- Create the server side client to host the chat
- Create the client side to connect to a chat
- Use threading to allow multiple server side instances to be created
- Create the front end design for the forum chat
- Connect the frontend to the backend

Create a Map that shows local businesses with markers and when selected shows the business details.



Assigned to Zeerak Parvez, Meghna Jagadeesh, Simon Luong, Kristupas Jakubonis.

Edited just now by Aadil Ahmad



Create merge request ▾

↑ Drag your designs here or [click to upload](#).

Tasks		4	Add ▾	^
<input type="radio"/>	Use a map API to get location data.		⋮	
<input type="radio"/>	Query the database for the locations of local events		⋮	
<input type="radio"/>	Use a map API to get locations of local business		⋮	
<input type="radio"/>	Display the locations as markers on the map		⋮	