

## Alice, 22: Games Organiser



### Location

The road race which Alice is organising will take place in the city centre. This makes it difficult to fill the pot holes in advance as access to these streets is restricted.



### History

There are plastic boards that are placed over pot holes when road works take place. Alice does not want to use these as they are made from plastic and bike wheels can slip on them. They are also raised off the ground which will slow competitors down



### First Thoughts

What pot hole covers are already used in every day life?  
What materials are thin, lightweight and non slip for cyclists to ride over?

## Alice, 22: Games Organiser



**My job is to organise the cycling road race which will take place in the city centre. Some of the roads that will be used have pot holes which can burst tyres and throw cyclists off their bikes. My team don't have time to fill in all the pot holes so I need a quick solution that will allow the race to go ahead and not put the competitors at risk.**





## Jamie, 21: Outdoor Spectator



### Location

Jamie does not live in the city centre and travels in for work every day using public transport. His work is not too far from Glasgow Green so he would walk there during his lunch break to watch the events on the big screen.



### History

Jamie has been to many of the big events hosted in Glasgow Green over the last few years so he knows the set up. Jamie does own a camping chair but feels it is too large and bulky to bring to work each day.



### First Thoughts

What are Jamie's main concerns about sitting on the grass to watch the games?

What are the main issues with current outdoor chairs that Jamie has used?

## Jamie, 21: Outdoor Spectator



**I'll be working while the games are on so instead of getting tickets I'll go to Glasgow Green during my breaks to watch some of the events. The issue is that I don't want to sit on the grass and get my suit wet or dirty before going back to work.**





## Amani, 28: Coach



### Location

Amani and the open water swim team will be based at Loch Lomond for the duration of the games. They have competed in many competitions in the past but Loch Lomond is known for being one of the darkest bodies of open water in the country so it can be very difficult to see someone when they are in it.



### History

Normally the team wear brightly coloured swimming caps that help Amani keep track of where they are but for the games they have to wear the national colours.



### First Thoughts

How can Amani keep track of her swimmers without making them wear something that will slow them down?

How can you keep track of people or objects in every day life? Could a similar system be used?

## Amani, 28: Coach



**I coach the open water swim team who will be competing at Loch Lomond during the championships this summer. There can be over 100 swimmers in the water at once so I find it hard to keep track of where my team are until they cross the finish line.**





## Emily, 21: Competitor



### Location

Emily will be taking part in the BMX events at Kightswood for the games. In order to compete a helmet must be worn.



### History

When she first started competing Emily had short hair so wearing a helmet was comfortable.

Now she has to tie her hair up and it can make the back of her head uncomfortable during competitions.

She must wear a full face guard and helmet



### First Thoughts

What are the most important parts of the head that the helmet needs to protect?

What materials could be used?

How can the helmet be adapted for different riders?

## Emily, 21: Competitor



**I will be competing in the BMX event at the championships. When I tie my hair up it can be uncomfortable wearing a helmet. It would be great if the helmet was more comfortable yet still provides the protection I need.**





## Craig, 44: Waste Manager



### Location

Craig is in charge of clearing all waste and rubbish from the championship venues.

The venues are spread across the city so Craig does not want to make unnecessary trips.



### History

Normally Craig has a rota for collecting rubbish from across the city but with venues expecting to be busy he will have to empty bins more often.

In the past venue employees would call him when rubbish needed picked up but some venues for the games do not have staff.



### First Thoughts

How can Craig be informed when a bin is full without going to the venue himself?

Can the hack be something that Craig has already or can be easily added/attached to the bins?

## Craig, 44: Waste Manager



**As waste manager I coordinate the collection of the rubbish from all venues connected to the games. These are widely spread across the city so I only want to make trips out if I have to. I need a way to know if a bin needs emptied without visiting the site.**





## Andy, 32: Mascot



### Location

Andy will be visiting lots of different event during the games dressed as 'Bonnie the Seal'. A lot of the venues he will be working at will be outside so if it is sunny the suit will get hot very quickly.



### History

Andy has been different mascots for sporting events over the years but being Bonnie is particularly hard work. Bonnie is a very active mascot so Andy has to move a lot when wearing the suit. The Bonnie suit also doesn't have a lot of ventilation so Andy finds that he cannot cool down when wearing the suit.



### First Thoughts

How can Andy keep himself cool when wearing the Bonnie suit?

What materials can the mascot be made of to make it cooler to wear?

Bonnie will still have to look the same as the mascot has already been used.

## Andy, 32: Mascot



**Being 'Bonnie the Seal' for the games can be great fun as I get to go to lots of events however, the Bonnie suit does not have a lot of ventilation and can get uncomfortably warm after 15 minutes.**





## Mohammed, 31: Spectator



### Location

Pickpockets are not deterred by venue or time so Mohammed will need a solution that works at all times.



### History

In the past Mohammed and his friends have lost phones, bank cards and cash to pickpockets. They are looking for a clever way to carry all these items but keep them safe from theft.

Mohammed and his friends do not usually carry bags so the more hidden your hack the better.



### First Thoughts

What items do you want to keep safe?

Who is the target market?

What material will be used?

Will it be hidden or visible?

## Mohammed, 31: Spectator



**My friends and I love going to large sporting events but always have to keep an eye out for pickpockets. We've had phones, bank cards and cash all stolen in the past. None of us want to carry a large secure bag but would like something that is small and hidden to help us carry our belongings safely.**





## Amira, 34: Mother and Spectator

EUROPEAN  
CHAMPIONSHIPS

### Location

Amira loves sports and will be taking her family to multiple events over the period of the championships.

Some of the events she plans on going to are outdoors and do not have many baby changing facilities.



### History

Amira always uses the baby changing facilities when attending large events but often has to wait in a queue. She would like a way to change her baby even if she's sitting in the middle of Glasgow Green.



### First Thoughts

What is needed in a baby changing facility?

What size would make the solution compact enough for Amira to travel with?

What does the baby need from the changing facility?

## Amira, 34: Mother and Spectator

EUROPEAN  
CHAMPIONSHIPS

**I often take my family to city wide events but struggle when it's time to change my baby. There is normally just one baby changing cubical and there is almost always a queue. Ideally I would have access to a baby changing facility all the time without the hassle of carrying it.**





## Michael, 55: Wheelchair User



### Location

Michael will be going to the events at the Emirates Arena for the games.

The venue does have disabled parking but people often park there when they are not meant to. This means Michael has to park in a much tighter space which he struggles to get out of.



### History

Michael attends city wide events often but regularly has issues with parking.

People who illegally park in disabled spots do get tickets but this does not help Michael as he still has to park in a tighter space. What he wants is a way to stop people parking in the disabled spaces in the first place.



### First Thoughts

How can disabled spaces be restricted to cars which are allowed to park in them?

One of Michael's main issues is that after people have parked in a disabled space no one tells them to move their car. Is there a way that the owner can be contacted and made to move?

## Michael, 55: Wheelchair User



**I have tickets to see some of the events at the Emirates Area this summer. I need a disabled parking space as I am a wheelchair user. People who do not have a blue badge park in the spaces all the time. I'd love a system that would make them stop them parking there in the first place.**





## Alex, 31: Spectator and Weather Optimist



### Location

Alex will be watching most of the action from the championships on the big screen in Glasgow Green.



### History

Alex often goes to outdoor sports events and always carries an umbrella or rain poncho.

She finds carrying an umbrella gets in the way as it does not fit into her bag. Some rain ponchos do not last and can rip easily. All Alex wants is something that will keep her hair dry incase it rains.



### First Thoughts

What materials are waterproof and light?

How can this be made portable?

What does Alex want to protect from the rain?

## Alex, 31: Spectator and Weather Optimist



**I can't wait to sit in Glasgow Green and watch all the action on the big screen. However, the weather is so unpredictable and I don't want my hair to get wet. I'd rather not carry an umbrella as they don't fit in my bag and rain ponchos just rip too easily.**

