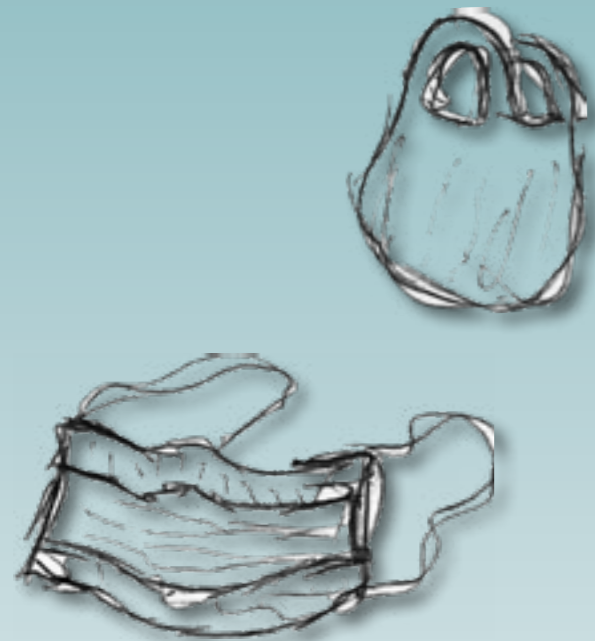


A mobile application  
encouraging a more  
ecological lifestyle.



## The Problem:

According to the World Health Organisation, seven million people die every year from exposure to polluted air, both indoor and outdoor. A link has been identified between poor air quality and an increased risk of stroke, heart disease, lung cancer, and chronic and acute respiratory diseases, including asthma. Air pollution is therefore considered the worlds number one environmental health risk.



## The Process:

Extensive research conducted on air quality on both a local and larger scale highlights the severity of this issue and the initiatives in place to deal with it. In particular, Winchester City Council has identified the main causes of their 4005.19 tonne CO<sub>2</sub>e carbon footprint as related to electricity usage, the construction industry and transport. As mobile technology becomes a more significant aspect of our lives, there has been a growing interest in lifestyle tracking apps.

## The Solution:

Particless, a mobile application which encourages users track their lifestyle choices, in attempt to influence them to behave more ecologically. The dynamic aesthetic, combined with the on-screen tips creates an engaging experience, with the intention of driving for social change.





Local air quality data is sourced once location is inputted, allowing the user to see what the air quality is like in their area.

The cityscape image is localised to whatever location the user is in. For example Winchester.



The user interface is animated, to create greater user engagement.



User can input their daily actions related to four different categories: Transport, Food, Energy and Waste.

Each category has different subcategories. The user can adjust the sliders to match what they have done on a particular day. For example, whether they have driven a lot or recycled.



particless

Current Location: WINCHESTER Change

Today's Air Quality: GOOD



Transport



Food

Users are able to view tips, which provide them with ideas on how they can make changes to their lifestyle.



The city remains bright and colourful, as long as the user is behaving ecologically. If they start behaving in ways which are damaging to the environment, the city will become dull and polluted.

Visual representation of local air quality- circle moves towards red end of the scale as air quality worsens.

The main intention for Particless is to empower its users to reduce their carbon footprint, in order to help improve the local air quality. Research has shown (see page 6) the impact of education, when attempting to do this. By making individuals aware of their impact on the environment, they will be empowered to make changes.

If individuals are able to make small changes, over time this is likely to have a larger scale impact, as people encourage others to also make these changes. Furthermore, Particless is an application which could be supported by local councils as part of their climate action plans. Using council funding, the app could be promoted to a wider audience. If more people are educated on this issue, then hypothetically more people will aim to reduce their carbon footprint, and thus help to improve the air quality.



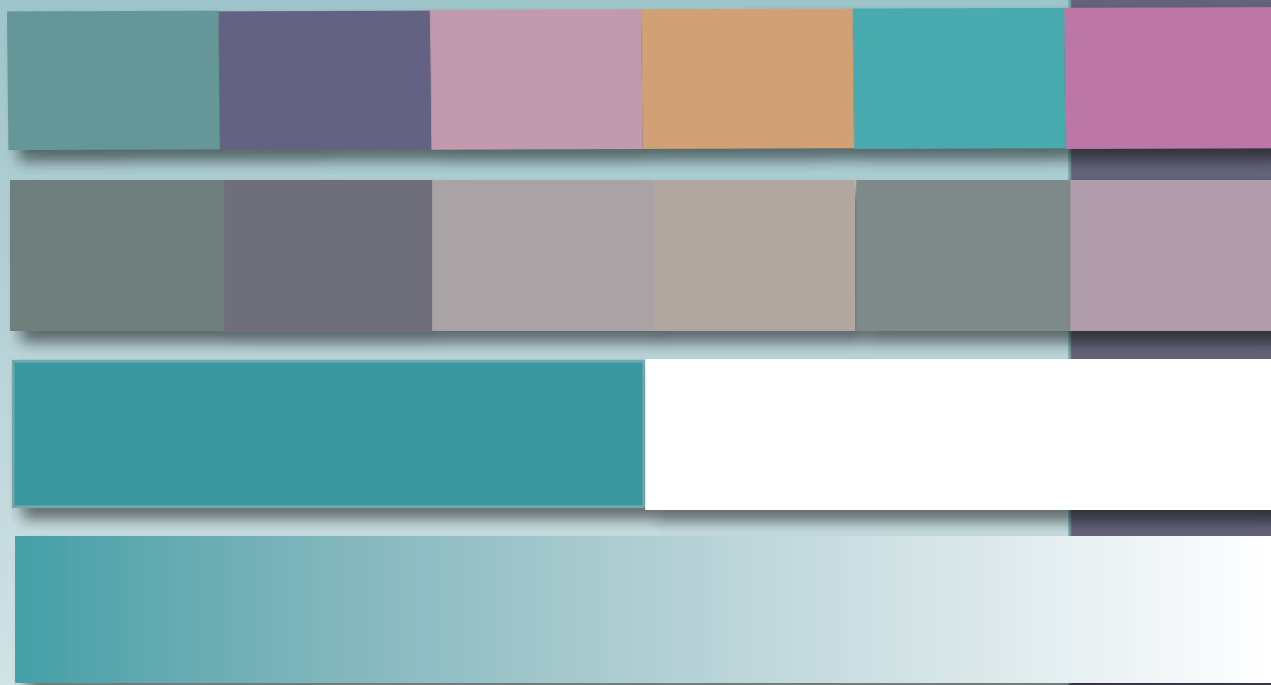
Here is the initial user interface design for Particless. This design was later discarded, in order to create the sleeker and more visually appealing appearance, which was used for the final design.



Here is the app icon for Particless.

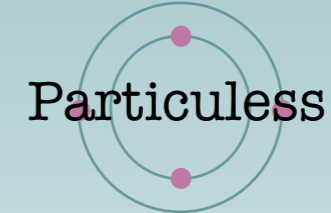


Here is the final logo for Particless. It is inspired by the atomic structure of carbon. This links with the name of the app, which is intended to relate with carbon particulates, which are a harmful pollutant.



Particless has multiple colour palettes, depending on which UI is currently displayed on the app. When the user inputs actions which are bad for the environment, the less vibrant colours appear. Turquoise and white are key colours in the app, featuring in the background and other elements. I thought that the turquoise colour looked quite clean and modern, which works nicely with the theme of the app.

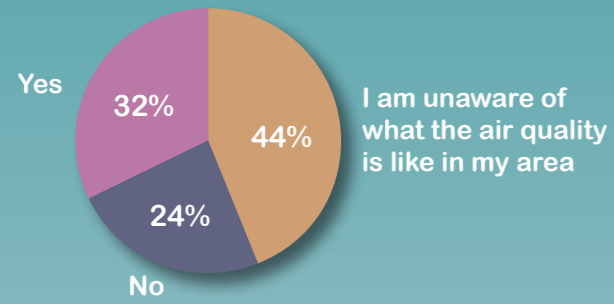
Other logo design ideas:



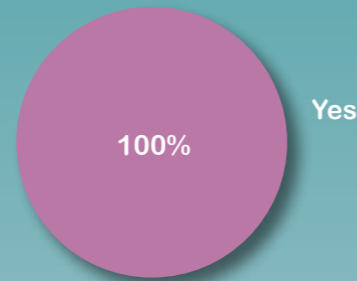
The user interface is dynamic and changes based on the actions of the user. If they input more ecological behaviour, the city remains bright and colourful, if they are harming the environment, it becomes dull and polluted. The user interface can also be localised. For example, here you can see Winchester and its landmarks.



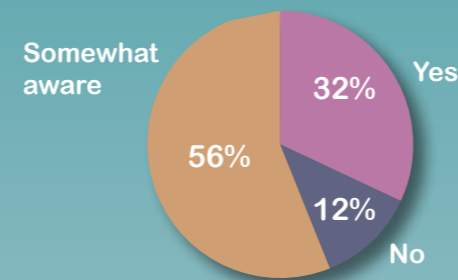
Are you concerned about the air quality in your local area?



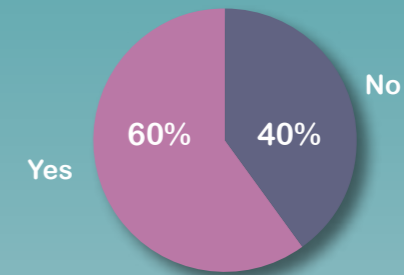
Over 90% of the worlds population is exposed to toxic levels of particulate matter on a daily basis. Are you concerned by this?



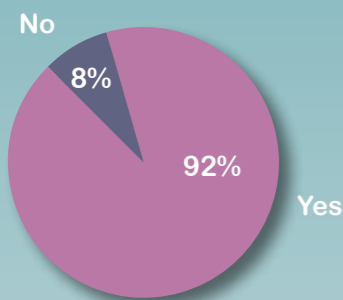
Are you currently aware of the environmental impact of your personal lifestyle choices?



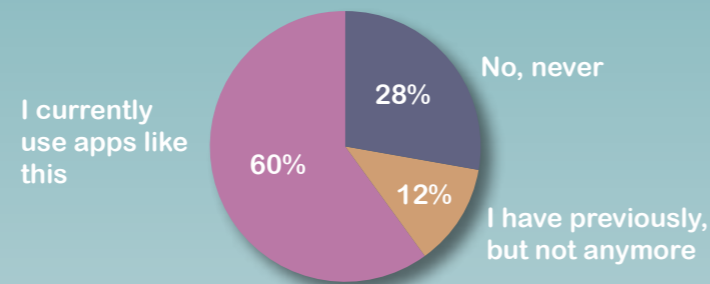
Do you actively choose to behave in a way which benefits the environment?



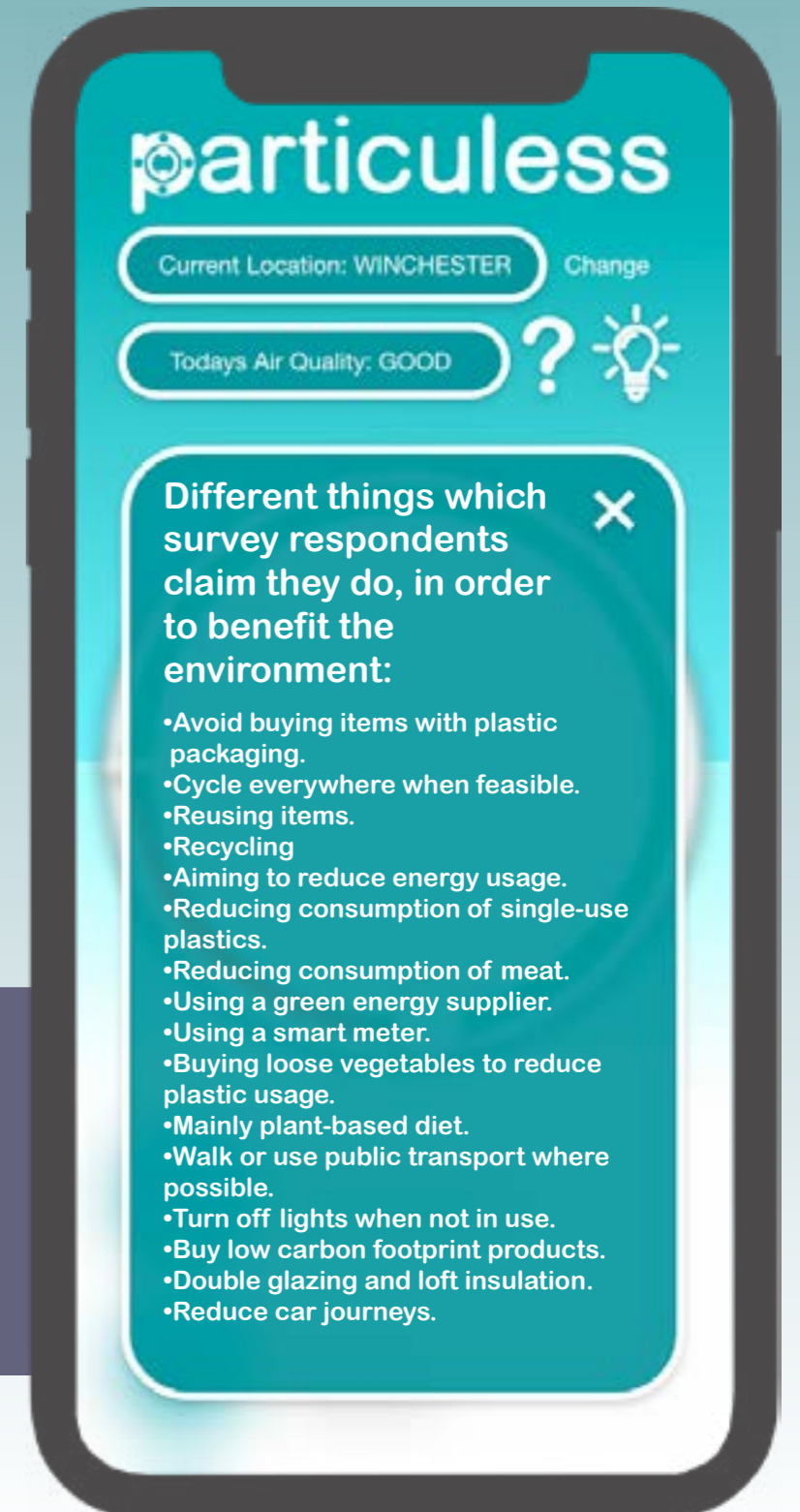
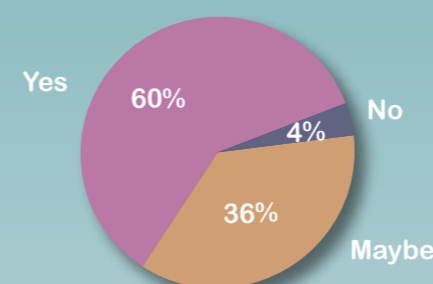
If you were made more aware of how your lifestyle choices impacted the environment, would you be more likely to make a change?



Do you currently, or have you ever used a mobile app to track specific aspects of your lifestyle?



Would you be interested in using an app to track your lifestyle, in order to help you to make more ecological choices.



**Key findings taken from my primary research:**

- People are concerned about the health impacts of poor air quality.
- People are generally aware of the impact of their lifestyle choices on the environment.
- People are more likely to change their lifestyle choices if they were aware of the impacts.
- People generally currently or have previously used lifestyle tracking apps- therefore there is a market for it.
- People were more concerned about the air quality when presented with information about the impacts.

From the primary research, it is evident that people generally already have some sort of an understanding on how their lifestyle choices impacts the environment, however it appears that they tend to not consider how the air quality will impact them. The main purpose of Particless is to therefore educate them on this, whilst encouraging them to actively change.

Overall the research outlines how there is a want for an app like Particless and that people would be willing to use it.

Secondary research has allowed me to gather a greater understanding of importance of improving the air quality, based on its impact on both the environment and human health. Poor air quality has been considered the worlds number one environmental health risk and has been linked to several long term health implications, some of which can be fatal (such as lung cancer). Furthermore, air pollution has been proven to contribute to global warming, whereby greenhouse gases such as carbon dioxide (CO2) trap heat in the atmosphere, causing the global surface temperature to increase.

It is therefore urgent for changes to be made, before further environmental and mass health implications are caused. People are generally aware of this however continue not to act accordingly. Therefore they need to be encouraged to do so. Particless is the solution to this.

**Different things which survey respondents claim they do, in order to benefit the environment:**

- Avoid buying items with plastic packaging.
- Cycle everywhere when feasible.
- Reusing items.
- Recycling
- Aiming to reduce energy usage.
- Reducing consumption of single-use plastics.
- Reducing consumption of meat.
- Using a green energy supplier.
- Using a smart meter.
- Buying loose vegetables to reduce plastic usage.
- Mainly plant-based diet.
- Walk or use public transport where possible.
- Turn off lights when not in use.
- Buy low carbon footprint products.
- Double glazing and loft insulation.
- Reduce car journeys.