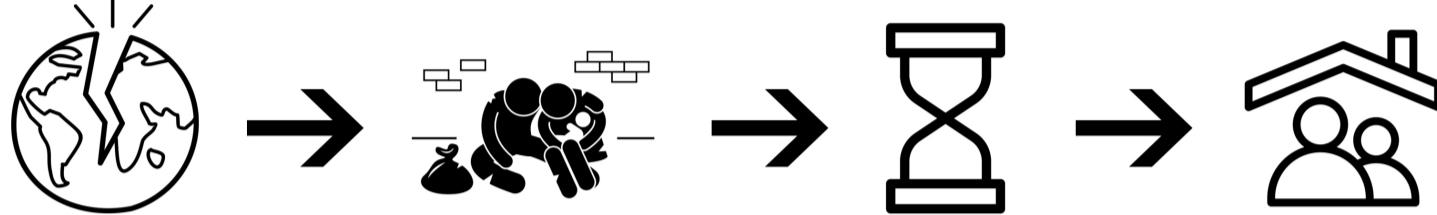


Find Your Shelter

User Experience

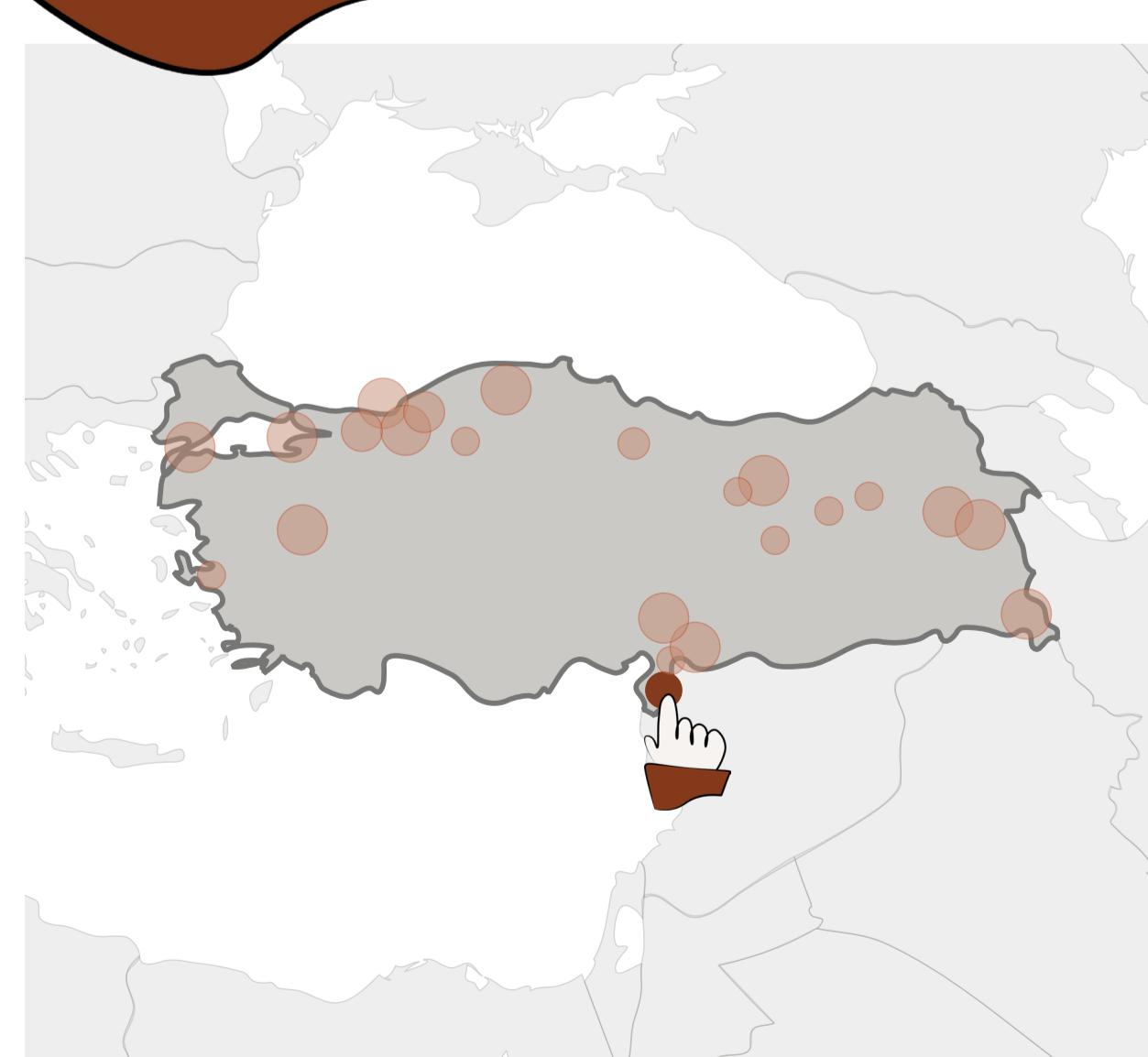
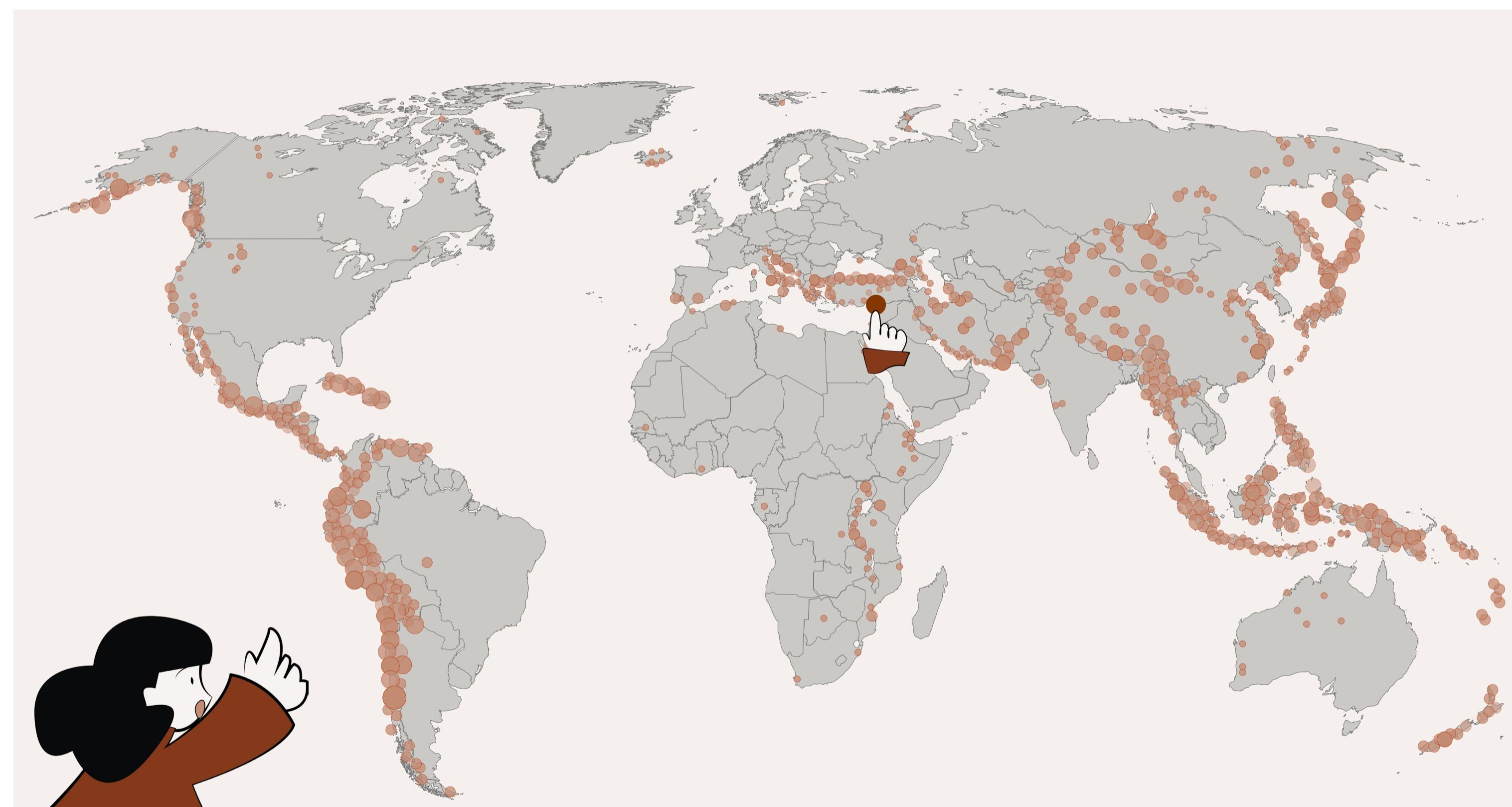
Problem Statement

From the moment a disaster takes place, every second counts for saving lives and providing basic human needs. In this process of emergency management, the (un)availability of data has a great impact on the decision making process. Making fast decisions results in instant relief, but making considerate decisions generally have a better long-term impact. In general, the current decision-making process is supported with manuals that focus on the quality of the shelter in a non-specific manner. They provide information to look into when designing a shelter for the location. In a short timeframe, it is difficult to collect the lessons that are learned in earlier shelter designs. The amount of shelters used in the past is enormous, but a clear overview still lacks. This reference framework based on the existing knowledge and requirements could help determine the optimal shelter design in any given situation.



Concept

With 'Find Your Shelter', the user is guided through the decisionmaking process that comes with supplying shelters for people in need. Where emergency shelter provision has a relatively straightforward approach (as many shelters as possible, as fast as possible) a lot more factors come into play once the duration of shelter needs elongates. The user opens an app or website, and provides the area that they aim to provide shelter for. The app scans this area, and suggests locations that are suitable for planned shelter camps. For each camp location, it shows the amount of people for whom this camp is closest, and it gives an indication of how many people can be hosted on this location. Based on the climate information of the location, a database of possible shelter options is being filtered by the Sphere minimum standards in shelter and settlement (Sphere, 2018). Then, the app returns a visualization of a selection of appropriate shelters, ranking life-span, cost, performance in potential natural disasters and more. It does a suggestion for the most appropriate shelters in this location, and shows the user the options. For each shelter, further information is being provided, including the most appropriate foundation type and a building guide.



Target Group

This tool supports in making the decision on which shelter design aligns best with the needs of shelter in the specified location. The tool is aimed for the organisations or authorities that are confronted with the implications of a natural disaster on (safe) housing availability. It is currently specified for the impact of an earthquake in Turkey, but is structured to only need little augmentations for worldwide application for all (natural) disasters.

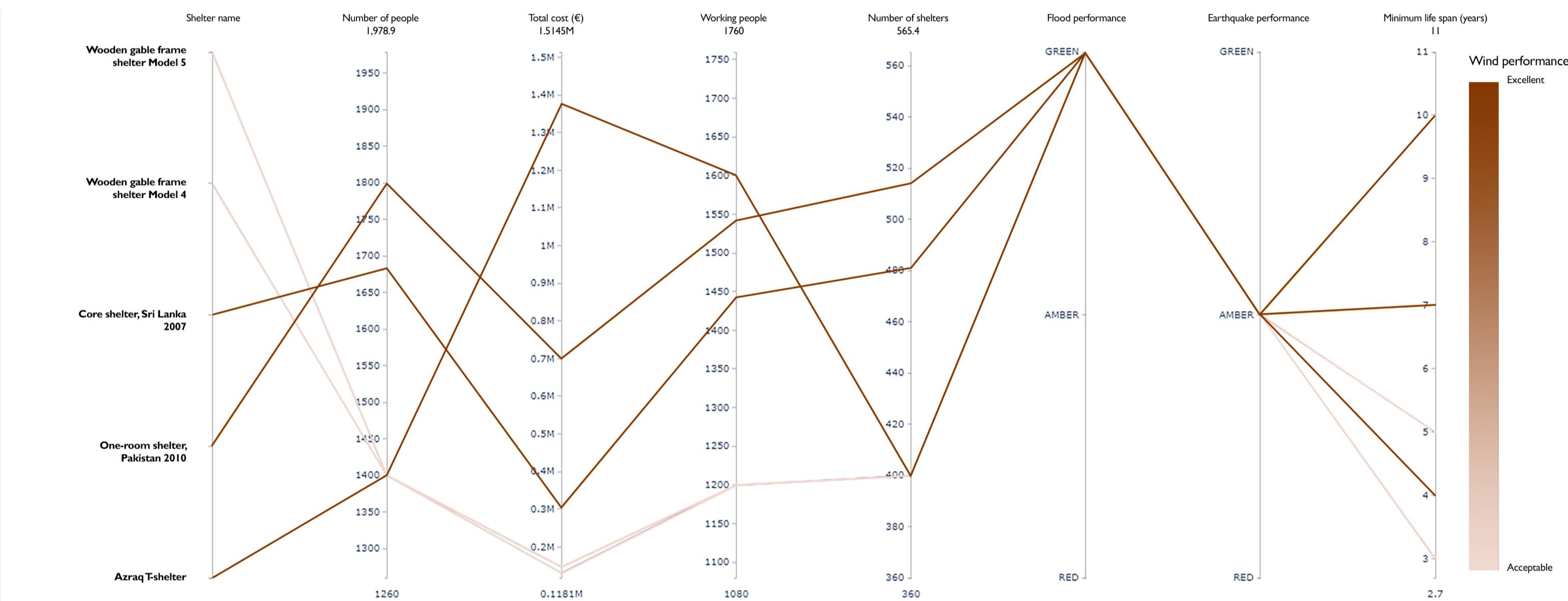


User Interface

The person can choose either to utilize the tool or propose the products to the tool.
To fill the tool: **Manufacturer**
To utilize the tool: **User**

Manufacturer: Manufacturer can fill in the detail of their shelter products. These products will be available to the people in need on the platform.

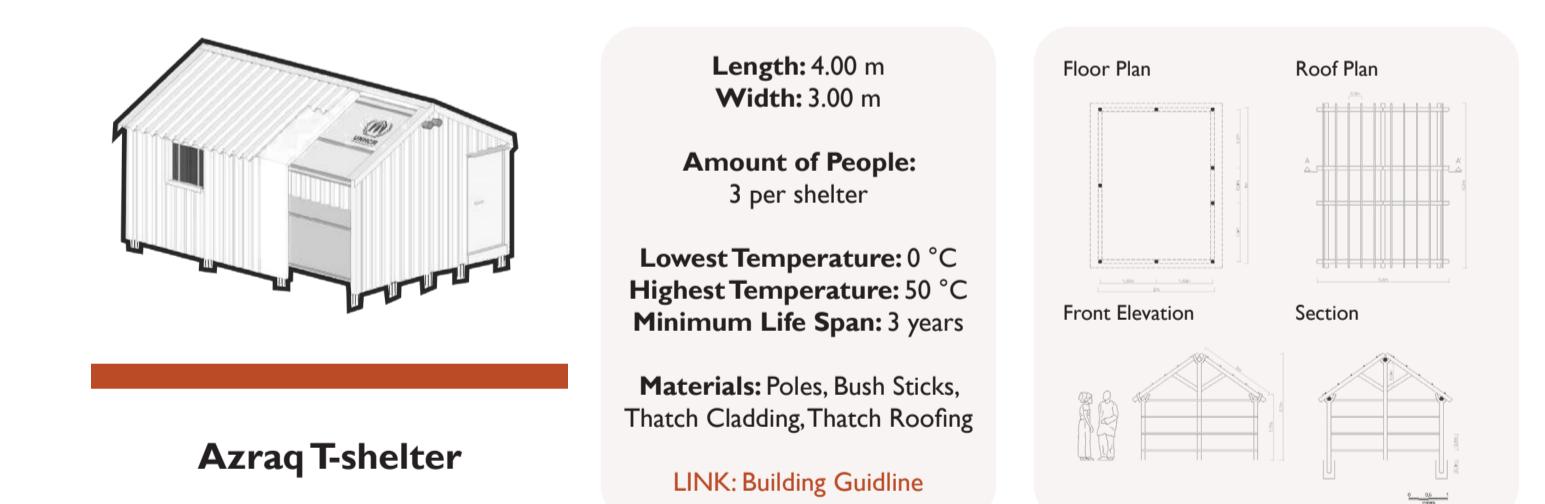
User: User can find the shelter solutions including shelter allocations, numbers and types via the interactive platform.



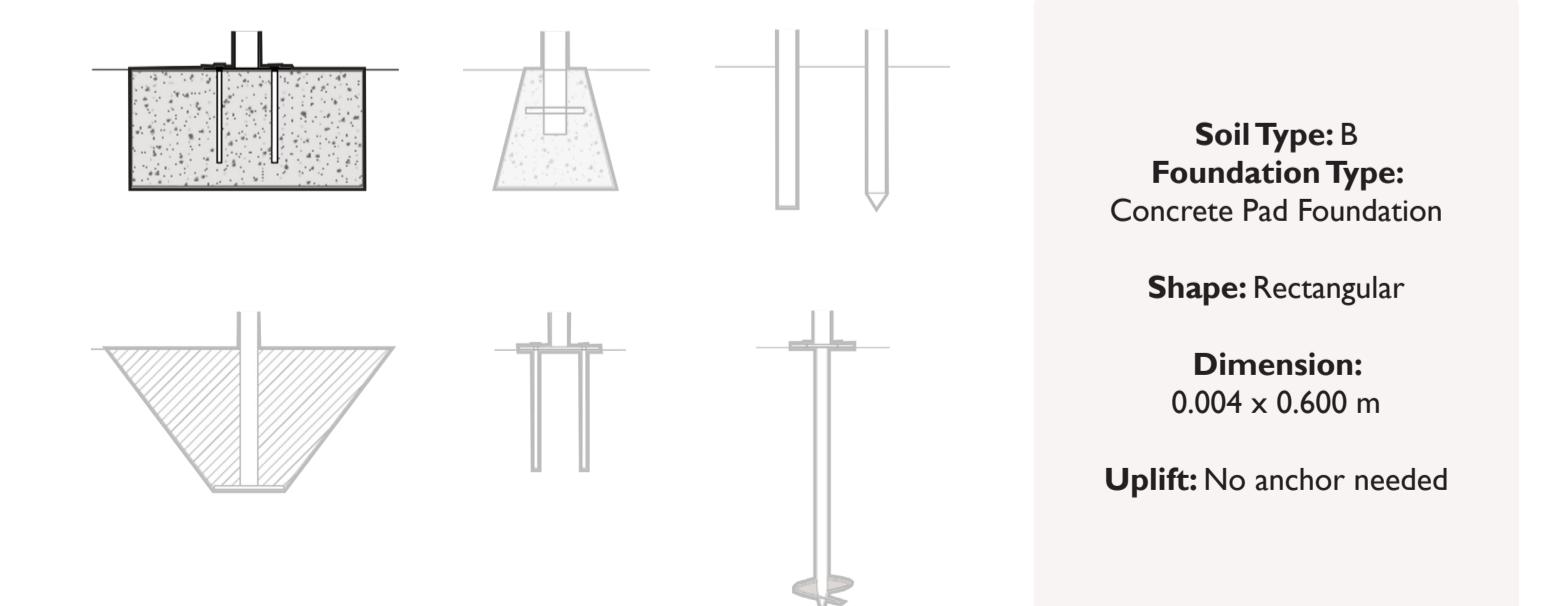
Shelters



Shelter Properties



Foundations



Find Your Shelter

Computational Workflow

