1 Related Work

In this chapter projects related to product configurators and activity sculptures will be presented. Each work presents a unique solution to the addressed problem, the approach each author took will be discussed and the adaptation of useful knowledge to this work will be explored. To conclude the chapter an overview of available vendor API for data import will be presented.

1.1 Web-based Interactive Product Visualization

This work has a particular interest in product configurators that make use of 3D computer graphics to visualize the product. The majority of modern web configurators are image based and make use of well designed backgrounds to place the product in well perceived environment. For example the UNU© GmbH electric scooter configurator1.1 puts the scooter on a street background that changes as the user moves to the next step of the configuration. Other systems may opt for a more minimalistic look, and will try to isolate the product and place it in a white background1.2. Although this might work for some products the user still misses some of the benefits of interacting with a spatial representation the products[**?**]. One of the main challenges of developing configurator systems is the modeling of the relation between the product configuration and its visual representation and the correct rendering of the visual representation in real time[**?**]. The advantage of a 3D visualization implementation against an image based is that the different configurations can be generated on the fly instead of using complex logic systems to retrieve the correct image combination from an image database. What is up

Figure 1.1: UNU GmbH© electric scooter web configurator[**?**]

Figure 1.2: Timbuk2© bag web configurator[**?**]

1.1.1 Gates 3D Configurator

1.1.2 Makervis

1.1.3 Twikit

1.2 Activity Sculptures

1.2.1 Sweet Atoms

1.2.2 Mental Fabrications

1.3 Activity Data Sources

1.3.1 Fitness Tracker APIs