Description of the data set.

This data set is a subset of a collection of statistically derived body shapes developed by the Institute of Biomechanics (www.ibv .org) for the InKreate project (https://www.inkreate.eu/). The purpose of the collection is to offer a set of ready-to-use realistic body shapes that could be used as basis for design development. Given the purpose of the collection, statistically available body shapes had to be grouped into a finite number of categories using parameters familiar to designers.

Parameters were selected based on market analysis, experience of the consortium members as well as IBV's previous research into body shapes. Grouping was done according to the following parameters:
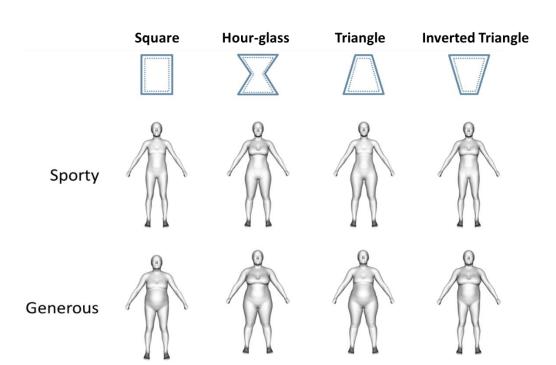
- Body size (related to body mass index and fitness status).
- Body shape (related to skeleton structure).
- Body height (average and tall).
- Body pose (commonly used poses in traditional design development).

While the first three parameters were used to define variability components from statistical analyses, the fourth parameter was applied to statistically derived body shapes created using the other three parameters. The analysis was done using scan data of 10,000 adult males and females [1,2] collected by IBV over the course of several years.

The original collection of body models consists of 32 female bodies and 24 male bodies. Combined with four poses, the final collection consists of 224 realistic avatars. The released subset includes 8 females and 6 males. This subset can serve to show design students how the shape of the body varies realistically according to its size and shape.

---

[1] Ballester, A., Parrilla, E., Uriel, J., Pierola, A., Alemany, S., Nacher, B. Gonzalez, J., Gonzalez, J.C. (2014) 3D-based resources fostering the analysis, use, and exploitation of available body anthropometric data. In: *5th International Conference and Exhibition on 3D Body Scanning Technologies*.

[2] Ballester, A., Valero, M., Nácher, B., Piérola, A., Piqueras, P., Sancho, M., … Alemany, S. (2015). 3D Body Databases of the Spanish Population and its Application to the Apparel Industry. In: *Proc. of 6th Int. Conf. on 3D Body Scanning Technologies*.

	Square	Hour-glass	Triangle	Inverted Triangle
Sporty				
Generous				

	Square	Hour-glass	Triangle
Sporty			
Stout			