In this final section, the application that was developed in the course of this

workshop is presented and some additional information like the link to the

project's presentation on hackster.io are provided.

**\subsection**{User Manual}

The way the user can interact with the application to

ease its shopping experience will be described subsequently.

**\subsubsection**{Starting SmartCart}

After starting SmartCart, the user will see the starting screen that is shown in

figure **\ref**{fig:start}. There are already some items added to

the initial shopping list. A user wanting to add additional items, might just

push the plus-button.

After the user is done with modifying the shopping list, the shopping can

be started by pushing on ``Go shopping''.

The screen that is depicted in figure **\ref**{fig:initial} is then shown and

the may now start to switch and add items to the cart by performing gestures

with the smartphone.

**\subsubsection**{Adding Items to the Cart}

To add the item, that is written in big letters on the top of the list, to the

cart, the user has to perform a circular gesture in the clockwise

direction.

The gesture starts at the bottom of the circle (6 o'clock), moves along the

lefthand side (9 o'clock), the top (12 o'clock) and back to the starting point

(via 3 o'clock). The item that is checked will be moved to the bottom of your list and will be written in

crossed out letters (see figure **\ref**{fig:firstItemChecked}). The app also

provides its user feedback, if a circle could be recognized and the item could

be added to the cart (see figure **\ref**{fig:feedbackCircle}).

**\subsubsection**{Switching Items on the List}

If a user wants so add an item to the cart that is not on the top of the list,

he is able to switch the list by performing an circular gesture in the

counter-clockwise direction. The gesture is again started on the bottom of the

circle. Analogous to the case of adding an item to the cart, the SmartCart

application provides feedback to its user about the successful switching of the

list (see figures **\ref**{fig:beforeSwitching} and **\ref**{fig:afterSwitching}).