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The Touchscreen Toolkit

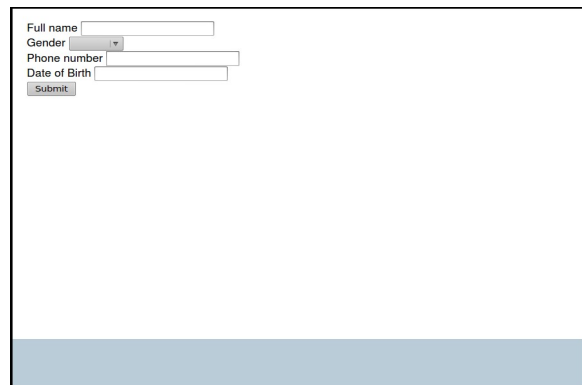
We created the Touchscreen Toolkit to simplify the development of touch-friendly user interfaces without requiring each page to be individually and consistently customized for touchscreens. It is a Javascript library that can be added to any HTML form. The library can be downloaded from <http://github.com/baobab/touchscreentoolkit>.

The Touchscreen Toolkit transforms standard HTML forms (Figure S7.A), just after they are loaded in a browser, into a set of wizard-like screens (Figures S7:B-E) showing each of the input fields on separate screens.

For each input field, the toolkit displays a customized full-screen window with:

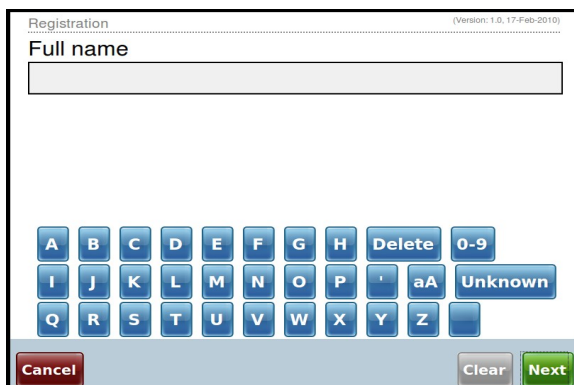
- Appropriate input controls
- User instructions
- Global navigation buttons (Next/Back)
- Data validation criteria (optional)

Fields can be “skipped” if a specified condition for each of the fields is not met.



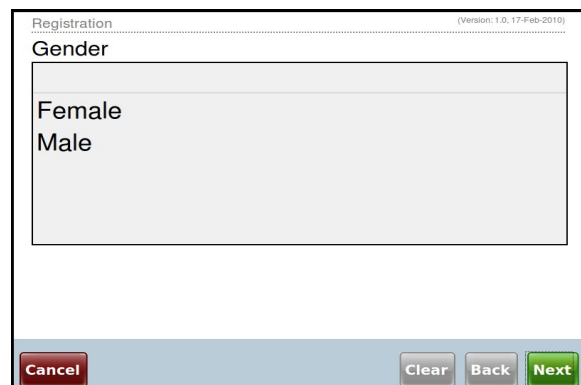
The image shows a standard HTML form with four input fields: 'Full name' (text), 'Gender' (dropdown), 'Phone number' (text), and 'Date of Birth' (text). A 'Submit' button is located at the bottom left of the form area.

Figure S7.A: Original HTML Form



The first wizard screen is titled 'Registration' and shows the 'Full name' field. Below the field is a full QWERTY keyboard with blue keys. At the bottom, there are three buttons: 'Cancel' (red), 'Clear' (grey), and 'Next' (green).

Figure S7.B: First wizard screen



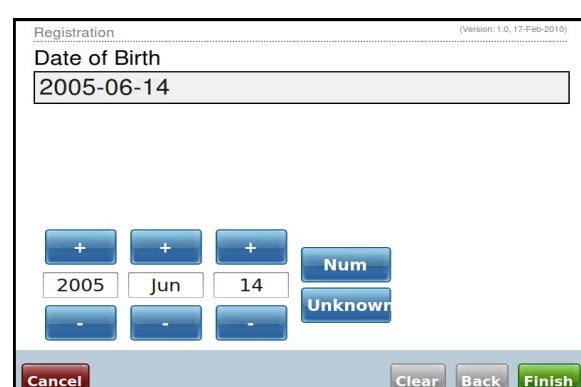
The second wizard screen is titled 'Registration' and shows the 'Gender' field. The field contains two options: 'Female' and 'Male'. At the bottom, there are three buttons: 'Cancel' (red), 'Clear' (grey), 'Back' (grey), and 'Next' (green).

Figure S7.C: Second wizard screen



The third wizard screen is titled 'Registration' and shows the 'Phone number' field. Below the field is a numeric keypad with blue keys, including symbols for '+', '-', '/', and '*'. At the bottom, there are four buttons: 'Cancel' (red), 'Clear' (grey), 'Back' (grey), and 'Next' (green).

Figure S7.D: Third wizard screen



The final wizard screen is titled 'Registration' and shows the 'Date of Birth' field. The field contains the date '2005-06-14'. Below the field are three date pickers for year, month, and day, each with a '+' button above it. At the bottom, there are four buttons: 'Cancel' (red), 'Clear' (grey), 'Back' (grey), and 'Finish' (green).

Figure S7.E: Final screen (note “Finish”)