

The Touchscreen Toolkit

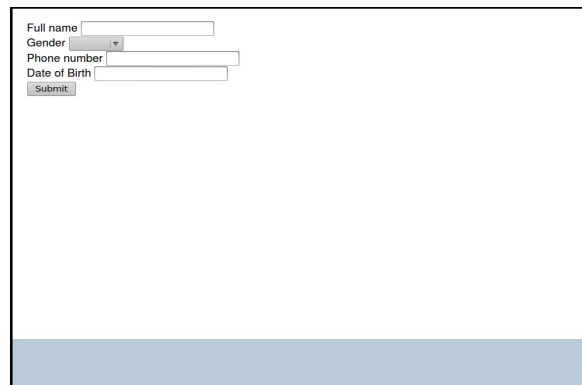
We created the Touchscreen Toolkit to simplify the development of touch-friendly user interfaces without requiring each page to be individually and consistently customized for touchscreens. It is a Javascript library that can be added to any HTML form. The library can be downloaded from <http://github.com/baobab/touchscreentoolkit>.

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:

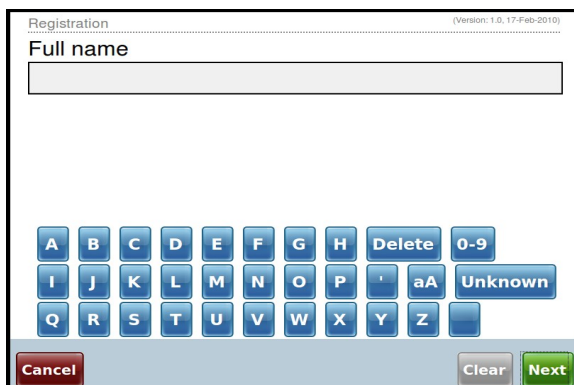
- Appropriate input controls
- User instructions
- Global navigation buttons (Next/Back)
- Data validation criteria (optional)

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



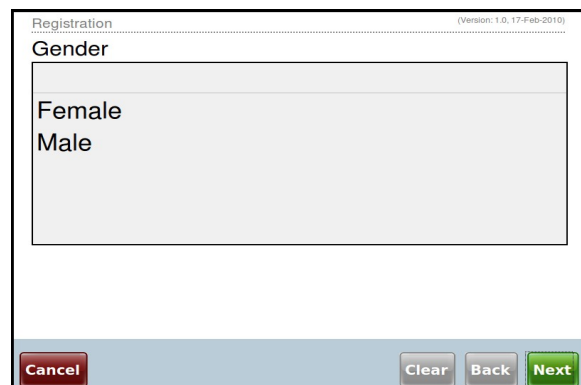
The image shows a standard HTML form with the following fields: "Full name" (text input), "Gender" (dropdown menu), "Phone number" (text input), and "Date of Birth" (text input). A "Submit" button is located at the bottom left of the form area.

Figure S7.A: Original HTML Form



The image shows the first wizard screen for the "Full name" field. The screen has a title bar "Registration (Version: 1.0, 17-Feb-2010)". Below the title bar is the label "Full name" and a text input field. At the bottom, there is a QWERTY keyboard with blue keys, a "Delete" key, and a "0-9" key. At the very bottom, there are three buttons: "Cancel" (red), "Clear" (grey), and "Next" (green).

Figure S7.B: First wizard screen



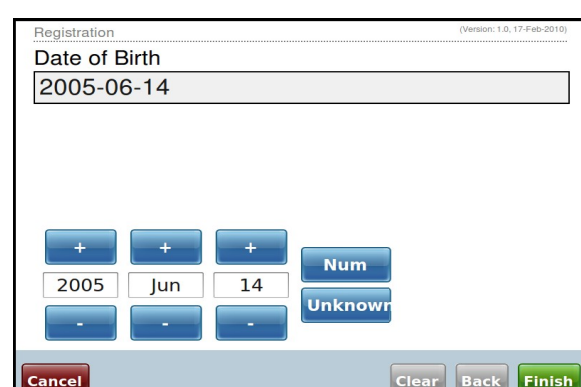
The image shows the second wizard screen for the "Gender" field. The screen has a title bar "Registration (Version: 1.0, 17-Feb-2010)". Below the title bar is the label "Gender" and a large text area containing the options "Female" and "Male". At the bottom, there are three buttons: "Cancel" (red), "Clear" (grey), "Back" (grey), and "Next" (green).

Figure S7.C: Second wizard screen



The image shows the third wizard screen for the "Phone number" field. The screen has a title bar "Registration (Version: 1.0, 17-Feb-2010)". Below the title bar is the label "Phone number" and a text input field. At the bottom, there is a numeric keypad with blue keys for digits 1-9, 0, and symbols like "+", "-", "/", "*", "A-Z", and "Date". There are also "Delete", "Unknown", and "aA" keys. At the very bottom, there are four buttons: "Cancel" (red), "Clear" (grey), "Back" (grey), and "Next" (green).

Figure S7.D: Third wizard screen



The image shows the final wizard screen for the "Date of Birth" field. The screen has a title bar "Registration (Version: 1.0, 17-Feb-2010)". Below the title bar is the label "Date of Birth" and a text input field containing the date "2005-06-14". At the bottom, there is a date picker interface with blue buttons for "+", "-", and "Num", and a "Unknown" button. At the very bottom, there are four buttons: "Cancel" (red), "Clear" (grey), "Back" (grey), and "Finish" (green).

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