

Introduction

The image displays a collection of HTML5 form input widgets. At the top, there are three calendar widgets: the first shows a date '2012-02-18' with a time '00:03' and a 'UTC' button; the second is a 'Select a week:' widget with a 'Soumettre' button; the third is another calendar for '2012-02'. Below these, there is an email input field with the text 'E-mail: ds' and a 'Soumettre' button. A red box highlights the email field, and a message box below it says 'Veuillez saisir une adresse courriel valide.' To the right of the email field is a telephone input field with the value '(555) 555-5555'. Below the email field is a color picker with a 'color:' label, a red color swatch, and a palette of colors. The color picker shows the hex code '#ed1c24' and an 'Autre...' button. To the right of the color picker is a range input field with a slider and the label 'Quantity (between 1 and 5):' with a value of '3'. Below the range input is a 'Grades:' label with a yellow-to-white gradient bar and a slider.

HTML5 forms

Forms have evolved considerably with HTML5, having shown little improvement since 1997. Web developers relied on many popular JavaScript frameworks for validating input formats, providing various input GUIs such as calendars for dates, sliders, etc. Frameworks like jQueryUI, Dojo, Sencha all provide a widget set for improving forms. Furthermore, it was time to take into account the specifics of mobile web applications, where the GUI of a date chooser cannot be the same as a 400x400 pixel wide calendar on a desktop. Contextual virtual keyboards showed the way forward on smartphones and tablets thanks to Apple, Google and others.

HTML5 took all these facts into account and now provides:

- A new set of input fields that include a validation API and visual feedback, contextualized keyboards, etc. Of course the look and feel depends on the web browsers' implementations, but the HTML5 forms specification introduced 13 new `<input type=.../>` fields: email, tel, color, url, date, datetime, datetime-local, month, week, time, range, number and search.
- Built-in validation system: JavaScript API for custom validation, CSS pseudo classes that are useful for changing an input field style depending on the validity of the input.

- Other goodies such as the option to set an input field out of a `<form>`, new elements such as `<datalist>` for autocompletion, `<output>` for feedback, etc.



Above, we can see examples of contextual keyboards; they differ depending on the type of `<input>` fields in the `<form>`. In the example we can see: email, URL, and phone number. Look at the different keyboard layouts. The last picture is a date picker from an IOS phone.

KNOWLEDGE CHECK 5.2.1 (NOT GRADED)

What is true about HTML5 forms?

- ☐ On mobile devices, contextual keyboard will appear when a user will interact with the new input types
 - ☐ HTML5 introduced 25 new input types which replace all the old ones from HTML4
 - ☐ There is a built-in validation system for input elements

☐ Some HTML5 input types work only on mobile devices

2 answers are correct!