



Application Development for Mobile and Ubiquitous Computing

Mobile Chef Second Presentation

GroupNo. 7

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Usecase Scenario

Bob:

- Bob is hungry.
- So he decides to make himself a meal.
- He walks to the kitchen and opens the fridge.
- There are plenty of things in there, but he has no idea how to put them together.
- He ends up...

... ordering a PIZZA.

Problem solved?

One week later, Bob has to throw food away only because no one showed him how to utilize the things in his kitchen.

That's why Mobile Chef:

Recipes and inspirations in your pocket.

Find, create, rank and share recipes in the most easy and accessible way possible.

Reduce the waste of food by showing people how to use what they already got in their fridge.

Technologies

Client-Server-Architecture

Client:

- any modern web browser
- only usual JS and HTML processing on the client side
- that's why the client is rather "light"
- not more impact on battery life than just normal web browsing

Client-Server-Architecture

Server:

- Ruby on Rails Framework
- Webrick, Thin, or Puma(or even others) as application servers
- "fat" server - precompiling, caching
- atm: SQLite as database storage, maybe PostgreSQL or MySQL

Responsive Web Design

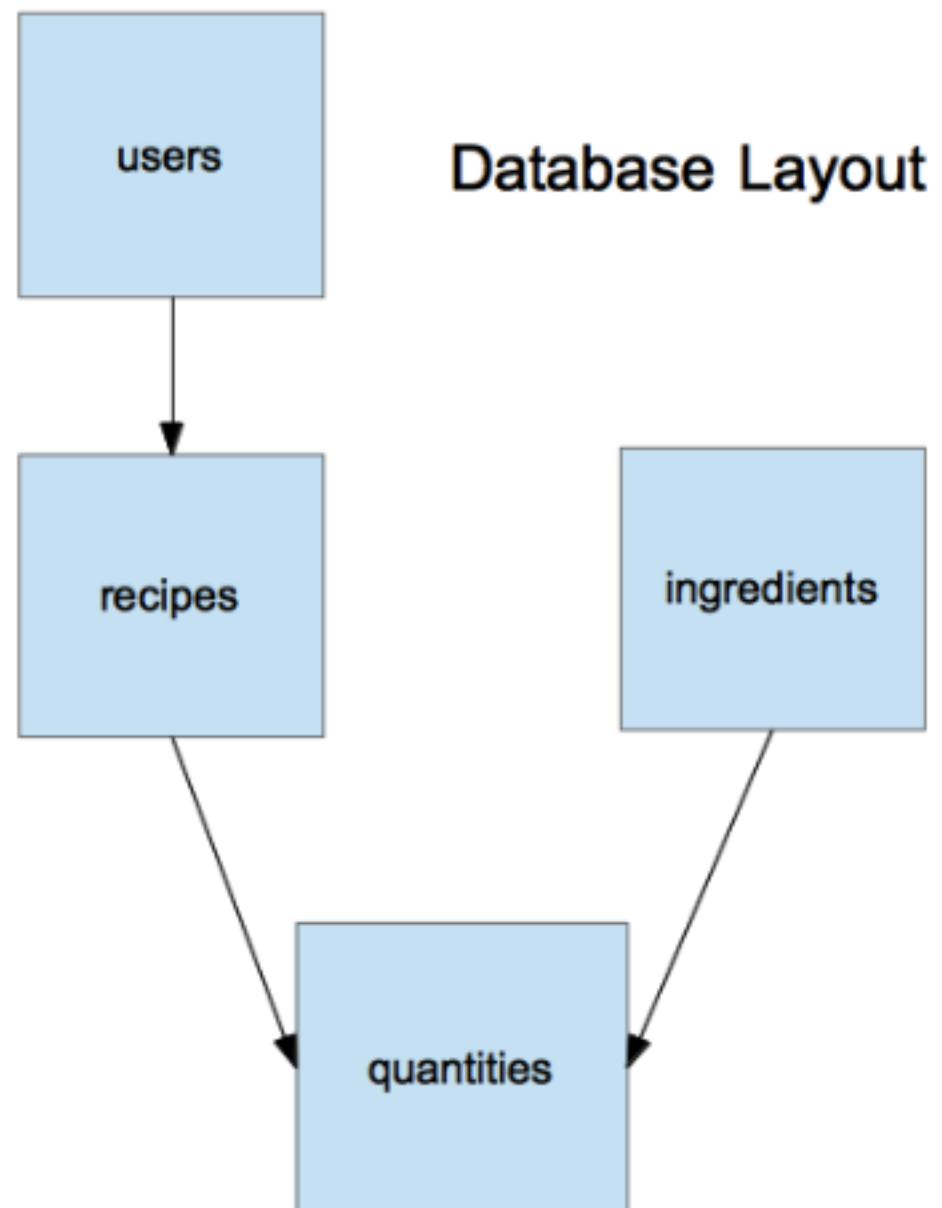
How?

- Bootstrap CSS Framework
- CSS3 - media queries

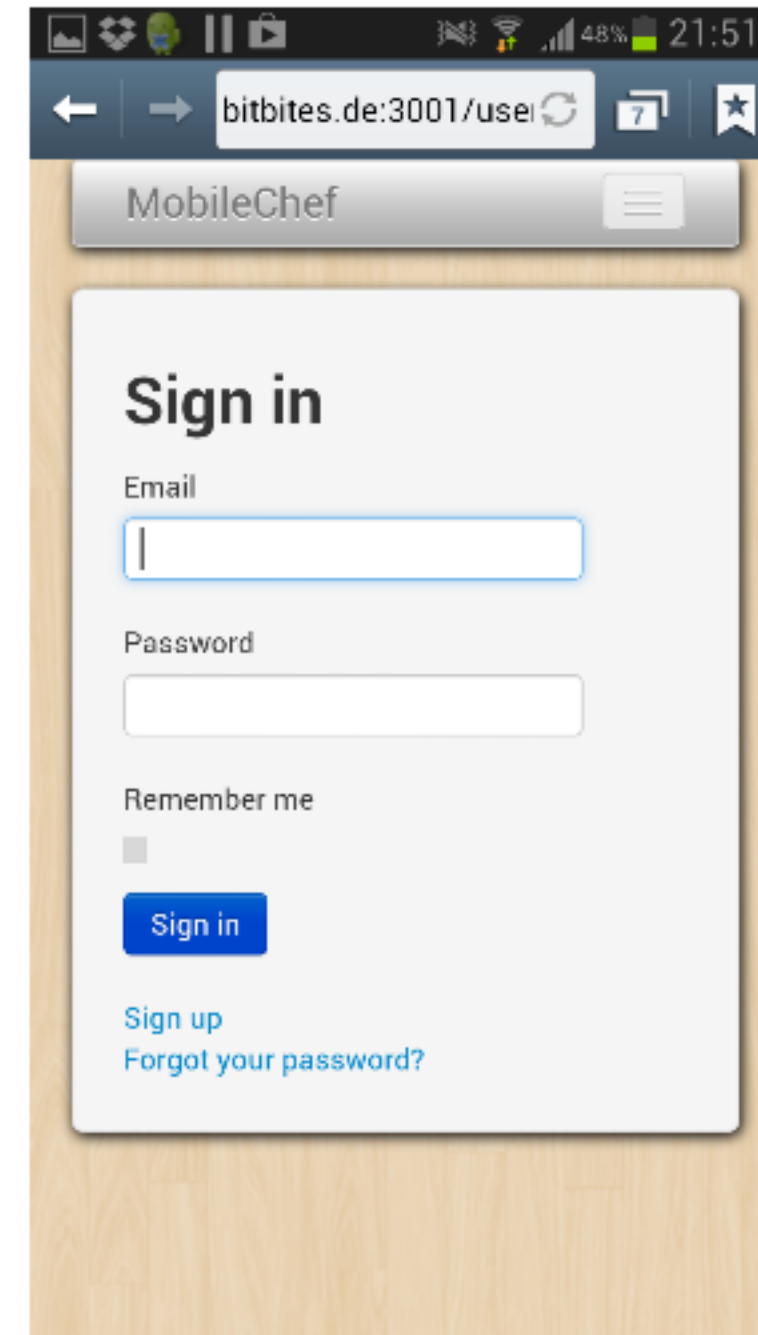
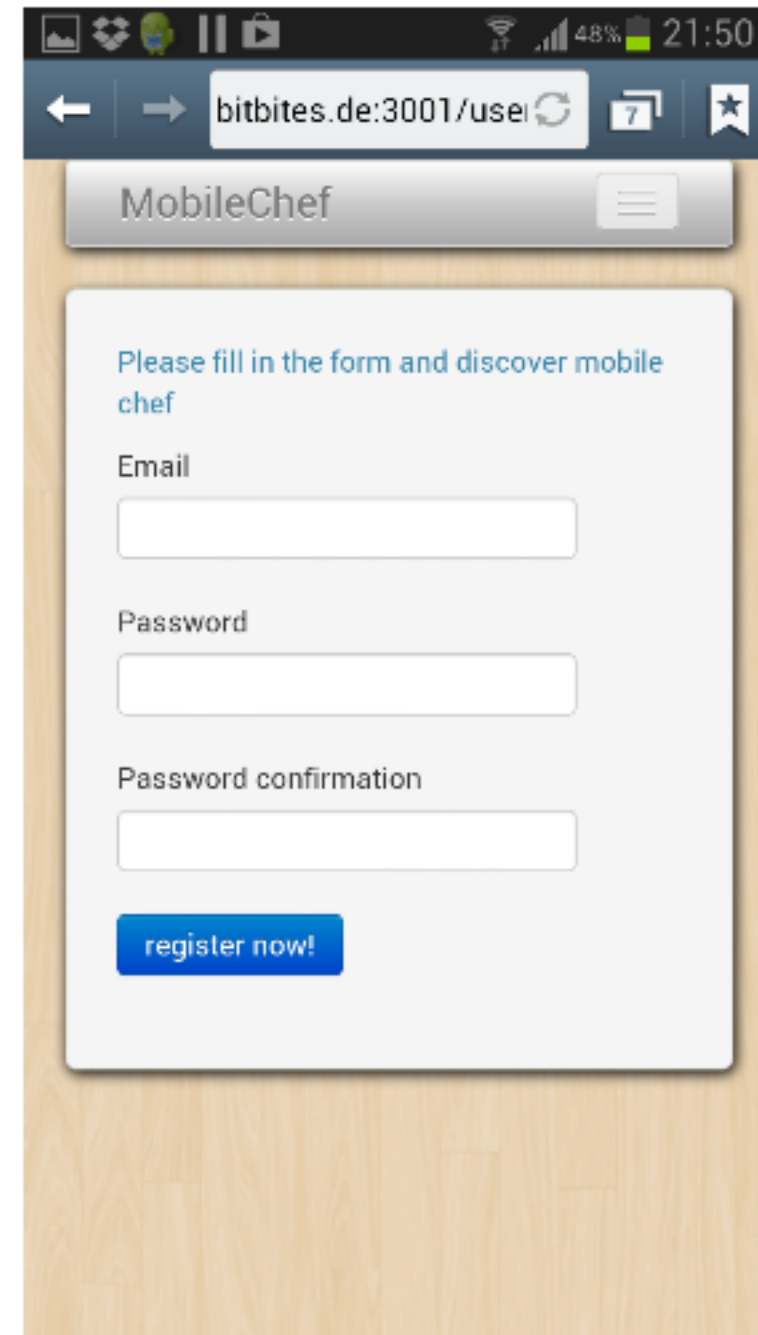
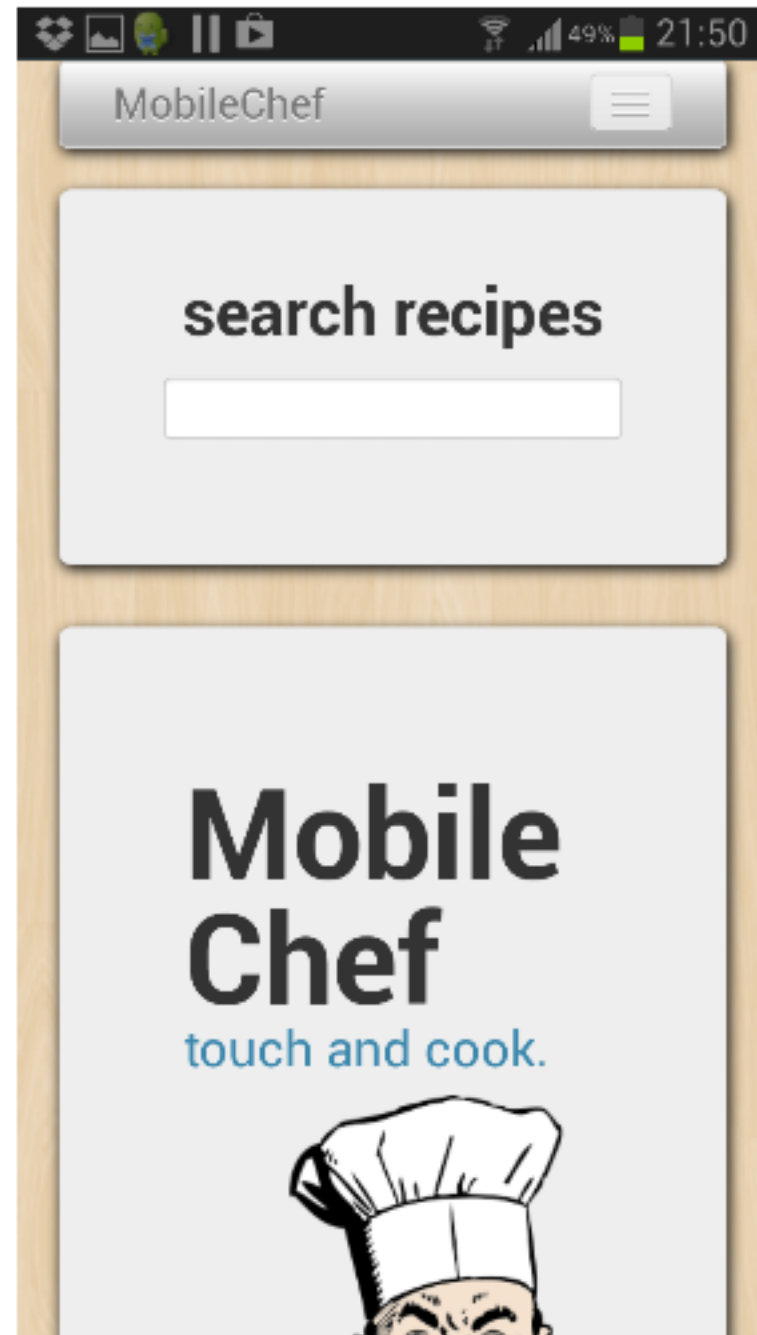
Label	Layout width	Column width	Gutter width
Large display	1200px and up	70px	30px
Default	980px and up	60px	20px
Portrait tablets	768px and above	42px	20px
Phones to tablets	767px and below	Fluid columns, no fixed widths	
Phones	480px and below	Fluid columns, no fixed widths	

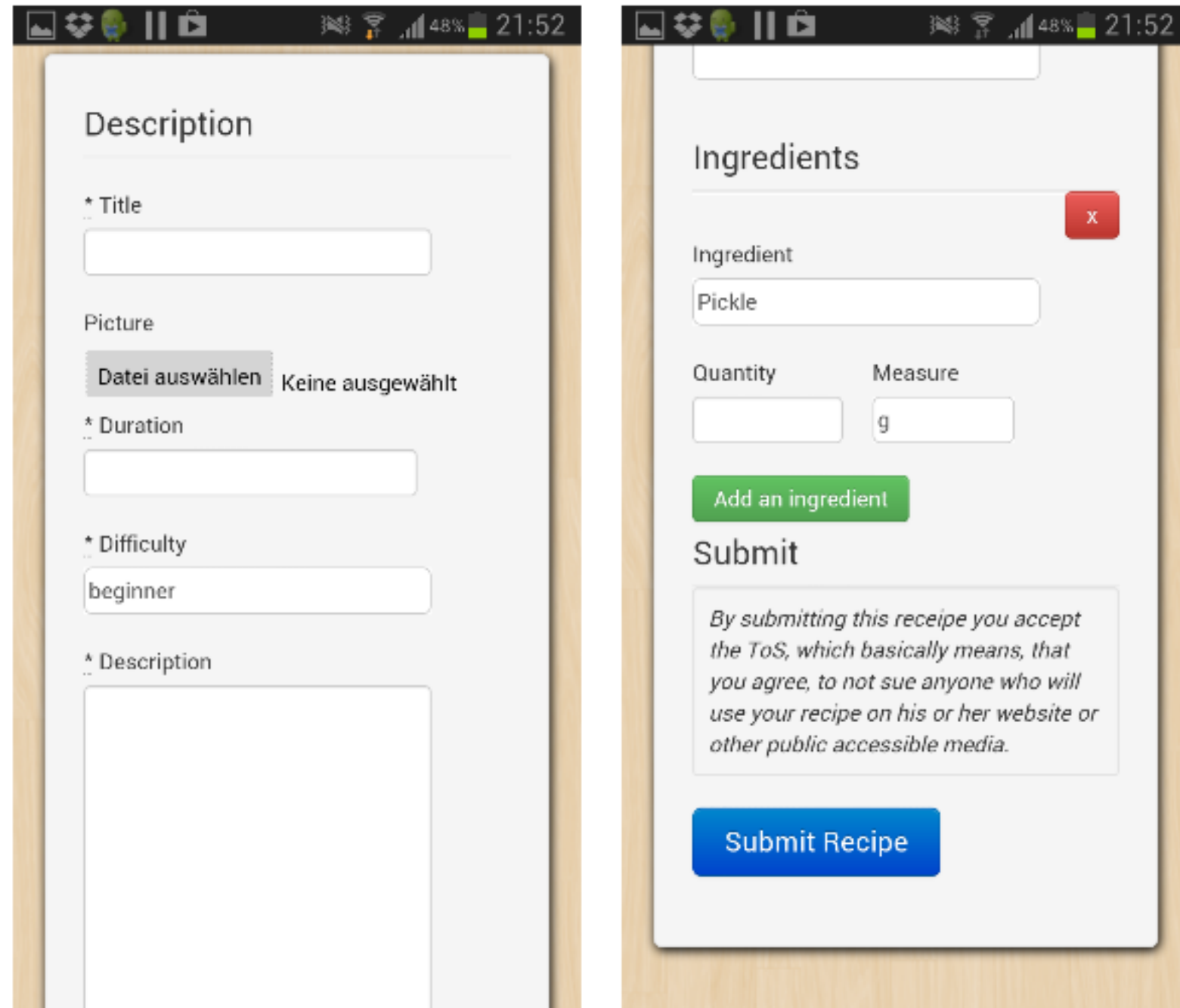
source: Bootstrap Documentation - <http://twitter.github.com/bootstrap/scaffolding.html#responsive>

Database - current state



Mockups - Demo





The image shows two screenshots of a mobile application interface for submitting a recipe. The left screenshot displays the 'Description' section with the following fields: 'Title' (empty), 'Picture' (with a 'Datei auswählen' button and 'Keine ausgewählt' text), 'Duration' (empty), 'Difficulty' (set to 'beginner'), and 'Description' (empty text area). The right screenshot displays the 'Ingredients' section with a red 'x' close button, an 'Ingredient' field containing 'Pickle', 'Quantity' (empty), and 'Measure' (set to 'g'). Below this is a green 'Add an ingredient' button. The 'Submit' section contains a text box with a disclaimer: 'By submitting this recipe you accept the ToS, which basically means, that you agree, to not sue anyone who will use your recipe on his or her website or other public accessible media.' and a blue 'Submit Recipe' button.

Description

* Title

Picture
Datei auswählen Keine ausgewählt

* Duration

* Difficulty
beginner

* Description

Ingredients

Ingredient x

Quantity Measure
 g

Add an ingredient

Submit

By submitting this recipe you accept the ToS, which basically means, that you agree, to not sue anyone who will use your recipe on his or her website or other public accessible media.

Submit Recipe

what challenges of mobile computing are tackled?

- ✓ accessible from nearly any device
- ✓ adaption of screen sizes
- ✓ resource friendly both in cases of battery and storage
- ✓ use of device hardware such as camera (integrated browser functionality)
- X awareness of geographical position (not yet)
- X disconnected operations (pretty sure not)

TODO

- find recipes by ingredients
- fill database with some ingredients and recipes
- build a better user interface
- rankings, budgets... gamification
- social network integration
- evaluation of the functionality by third parties

Questions