Forms: Browser-to-Server Communication
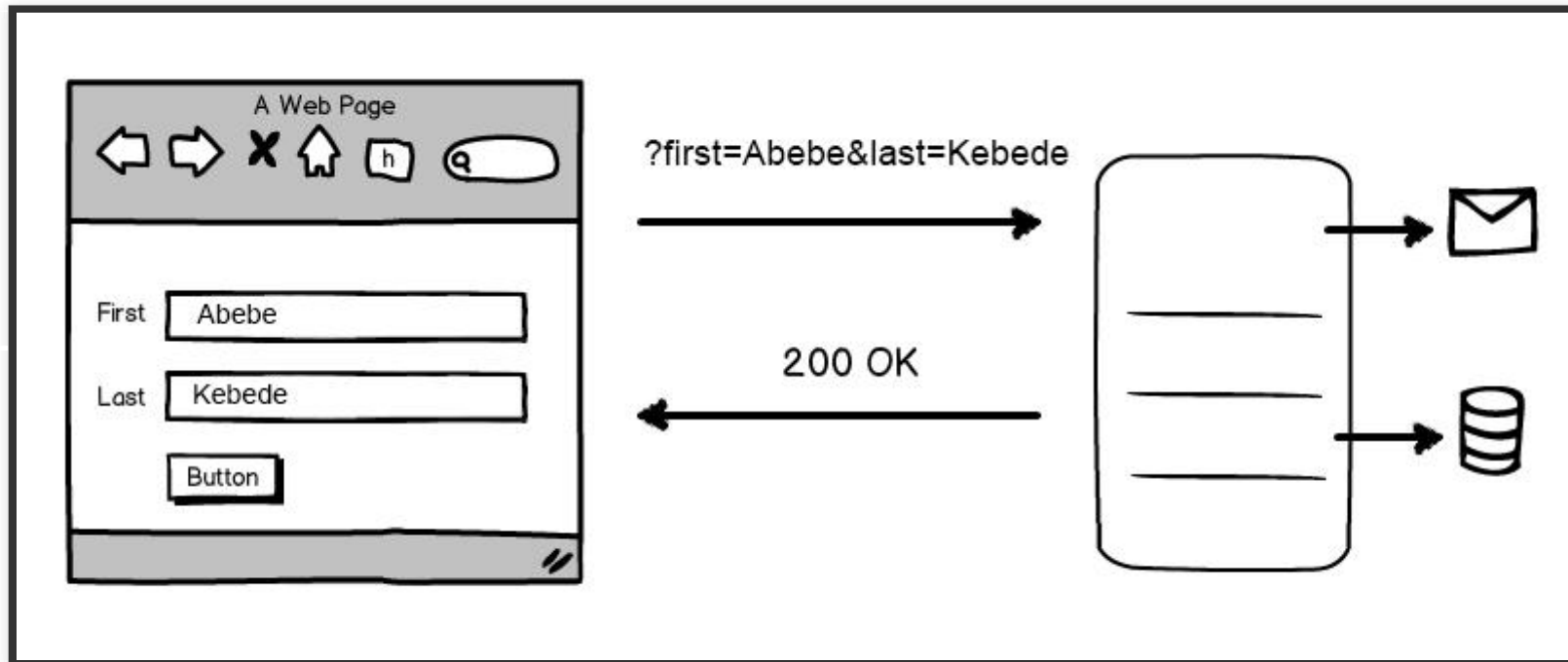
The Form HTML

```html
<form action="http://example.com/processform.php"
  method="get">
  <input type="text" name="first">
  <input type="text" name="last">
  <button type="submit">Send Data</button>
</form>
```

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The Form HTTP Request: GET

Request:

```
GET /processform.php?first=Abebe&last=Kebede HTTP/1.1
Host: example.com
```

Response:

```
200
<doctype html>
<html>
  <head>
    <title>Welcome to my website!</title>
    …
</html>
```

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Form element

```
<form action="http://example.com/processform.php"
   <b>method="get"></b>
</form>
```

```
<form action="http://example.com/processform.php"
   <b>method="post"></b>
</form>
```

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The Form HTTP Request: POST

Request:

```
POST /processform.php HTTP/1.1
Host: example.com
first=Abebe&last=Kebede
```

Response:

```
200
<doctype html>
<html>
  <head>
    <title>Welcome to my website, Abebe!</title>
    …
</html>
```

Input element

```
<input type="text" name="animal">
```

```
<input type="text" name="animal" value="Red Fox">
```

Red Fox

Button element

```
<button type="submit">Submit order</button>
```

Submit order

```
<button type="reset">Start over</button>
```

Red Fox   Start over

```
<button type="button">Customize</button>
```

Customize

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Label element

```
<label> Animal:
<input type="text" name="animal">
</label>
```

Or

```
<label for="animal"> Animal: </label>
<input type="text" name="animal" id="animal">
```

Animal [   ]

Checkboxes

Yes/No questions:

```html
<label> Do you agree?
<input type="checkbox" name="agreement"/>
</label>
```

Do you agree? ☐

Multiple options:

```html
Options:
<input type="checkbox" name="opt1" id="opt1">
<label for="opt1">Option 1</label>
<input type="checkbox" name="opt2" id="opt2">
<label for="opt2">Option 2</label>
```

Options: ☐ Option 1 ☐ Option 2

Radio buttons

Multiple choice:

```html
<fieldset>
  <legend>Pizza Size:</legend>
  <label for="small">Small</label>
  <input type="radio" name="size" id="small" value="small">
  <label for="medium">Medium</label>
  <input type="radio" name="size" id="medium" value="medium">
  <label for="large">Large</label>
  <input type="radio" name="size" id="large" value="large">
</fieldset>
```

Pizza Size:
Small ○ Medium ○ Large ○

The select element

```html
<label for="os">Your OS?:</label>
<select name="os" id="os">
  <option value="win">Windows</option>
  <option value="mac">Macintosh OSX</option>
  <option value="linux">Linux</option>
</select>
```

Your OS?: Windows ▼

Textarea element

```html
<label>Delivery instructions: <br>
<textarea name="delivery"></textarea>
</label>
```

Delivery instructions:

```html
<label>Write your delivery instructions: <br>
<textarea name="delivery" rows="3" cols="40"></textarea>
</label>
```

Write your delivery instructions:

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Forms in HTML5

```
<input type="email"
placeholder="name@email.com">
```

name@email.com

```
<input type="range" min="0" max="50"
value="10">
```

```
<input type="color">
```

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