BIT

Forms

BIT What is a form?

How form works

- Collect user data
- Pass collected data to web server
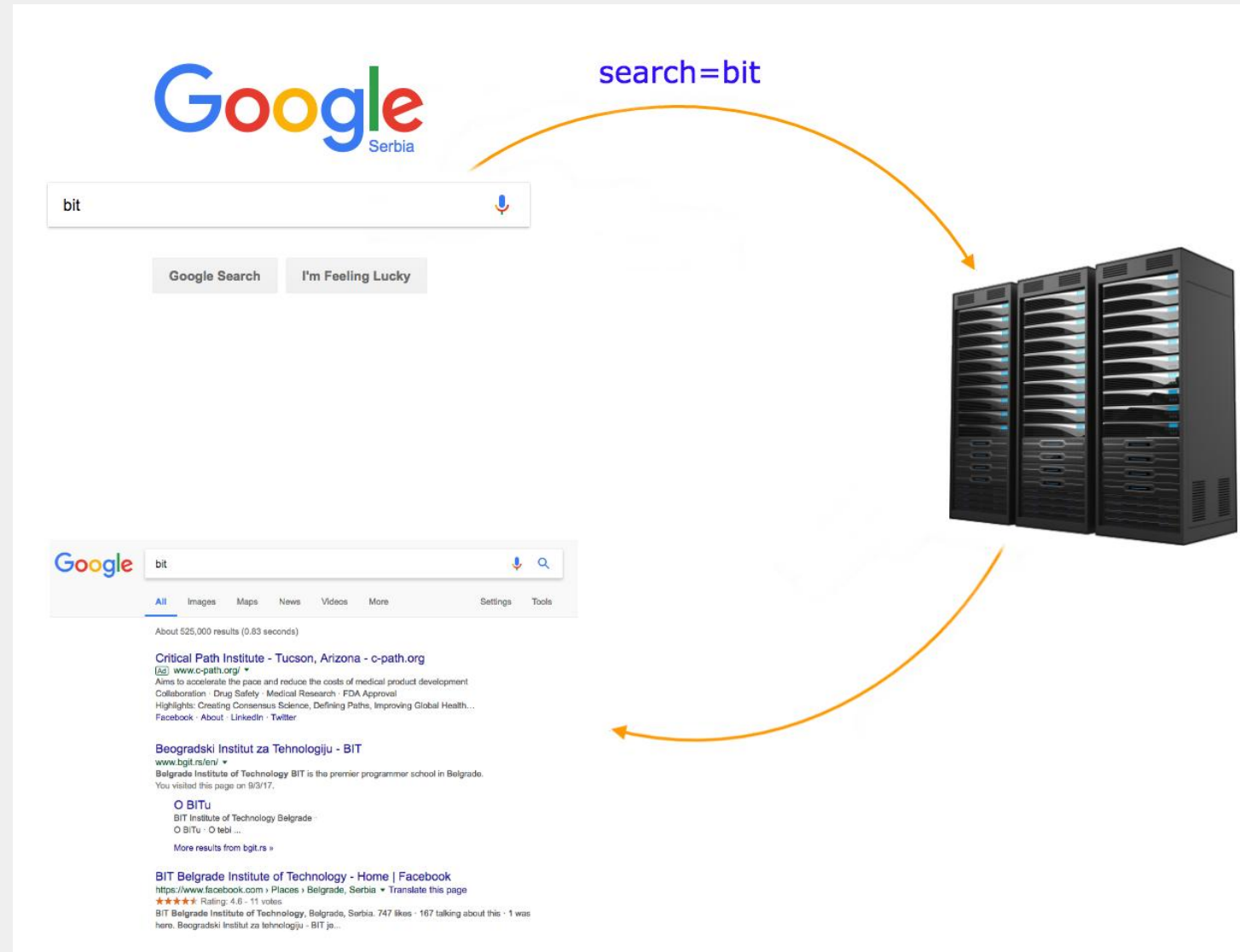
Form Structure

- Required attributes
  - Action (URL)
  - Method
    - GET
    - POST

- Each element inside a form needs to have the name attribute

```
<form action="http://www.example.com/subscribe.php" method="get">
    <p>This is where the form controls will appear.</p>
</form>
```

This is where the form controls will appear.

Text Input

- Used for a relatively small (one-line) text input
- <input> element with type="**text**"

```
<form action="http://www.example.com/login.php">
    <p>Username:
        <input type="text" name="username" size="15" maxlength="30" />
    </p>
</form>
```

Username: [   ]

Password Input Field

- Masks input with dots
- <input> element with type="**password**"

Username: nenad

Password: •••••

```
<form action="http://www.example.com/login.php">
    <p>Username:
        <input type="text" name="username" size="15" maxlength="30" />
    </p>
    <p>Password:
        <input type="password" name="password" size="15" maxlength="30" />
    </p>
</form>
```

Exercise

Text Area

- **<textarea>** element
- Used for big blocks of text
- Define default rows and columns
  - rows
  - cols

What did you think of this gig?

Enter your comments...

```
<form action="http://www.example.com/comments.php">
    <p>What did you think of this gig?</p>
    <textarea name="comments" cols="20" rows="4">Enter your comments...</textarea>
</form>
```

Radio Buttons

- <input> element with type="**radio**"
- You can select one option
- Name has to be the same

Please select your favorite genre:
◉ Rock ○ Pop ○ Jazz

```
<form action="http://www.example.com/profile.php">
    <p>Please select your favorite genre:
        <br />
        <input type="radio" name="genre" value="rock" checked="checked" /> Rock
        <input type="radio" name="genre" value="pop" /> Pop
        <input type="radio" name="genre" value="jazz" /> Jazz
    </p>
</form>
```

Checkbox

- <input> element with type="**checkbox**"
- Allows user to select multiple options
- Name has to be the same

Please select your favorite music service(s):
☑ iTunes ☐ Last.fm ☐ Spotify

```
<form action="http://www.example.com/profile.php">
    <p>Please select your favorite music service(s):
        <br />
        <input type="checkbox" name="service[]" value="itunes" checked="checked"> iTunes
        <input type="checkbox" name="service[]" value="lastfm" /> Last.fm
        <input type="checkbox" name="service[]" value="spotify"> Spotify
    </p>
</form>
```

BIT

Exercise

Dropdown List

- **<select>** is the list's "parent" element
  - the name attribute is associated with select
- **<option>** element is a single option in the list
  - Selected option has the **selected** attribute
  - The first option is always selected by default

```
<form action="http://www.example.com/profile.php">
    <p>What device do you listen to music on?</p>
    <select name="devices">
        <option value="ipod">iPod</option>
        <option value="radio">Radio</option>
        <option value="computer">Computer</option>
    </select>
</form>
```
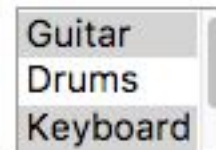
What device do you listen to music on?

[iPod ‹›]

What device do you listen to music on?

✓ iPod
  Radio
  Computer

Multiple Select Box

- <select> element that contains <option> elements
- **multiple="multiple"** (attribute on the select element)

```html
<form action="http://www.example.com/profile.php">
    <p>Do you play any of the following instruments? </p>

    <select name="instruments[]" size="3" multiple="multiple">
        <option value="guitar" selected="selected">Guitar</option>
        <option value="drums">Drums</option>
        <option value="keyboard" selected="selected">Keyboard</option>
        <option value="bass">Bass</option>
    </select>
</form>
```

Do you play any of the following instruments?

Guitar
Drums
Keyboard

BIT

Exercise

File Input Box

- Sends files to the server (image, video, pdf)
- POST method must be used
- UI consists from:
  - Button
  - File path label

Upload your song in MP3 format:

Choose File No file chosen

Upload

```
<form action="http://www.example.com/upload.php" method="post">
    <p>Upload your song in MP3 format:</p>
    <input type="file" name="user-song">

    <br>

    <input type="submit" value="Upload">
</form>
```

Submit Button

- Triggers sending form to the web server
- <input> element with type="**submit**"
- **Value** attribute is used for defining button label

```
<form action="http://www.example.com/subscribe.php">
    <p>Subscribe to our email list:</p>
    <input type="text" name="email" />
    <input type="submit" name="subscribe" value="Subscribe" />
</form>
```

Subscribe to our email list:

pera@gmail.com   Subscribe

Submit Button as Image

- <input> element with type="**image**"

```
<form action="http://www.example.org/subscribe.php">
    <p>Subscribe to our email list:</p>
    <input type="text" name="email">
    <input type="image" src="https://goo.gl/za5ksx" width="100" height="50">
</form>
```

Subscribe to our email list:

Subscribe ▶

pera@gmail.com

Exercise

Reset Button

- Returns form to default state

```
<form action="/action_page.php">
    Email: <input type="text" name="email">

    <br>

    Pin: <input type="text" name="pin" maxlength="4">

    <br>

    <input type="reset" value="Reset">
    <input type="submit" value="Submit">
</form>
```

Email:
Pin:
Reset   Submit

Button

- **<button>** element
- Flexibility in how button looks

```
<form action="http://www.example.com/add.php">
    <button>
        <img src="https://goo.gl/4qaPWi" alt="add"width="10" height="10">
        Add
    </button>
</form>
```

Hidden Input

`BIT`

- `<input>` element with type="**hidden**"
- Not part of UI
- Passes information to the server without showing it to the user

```
<form action="http://www.example.com/add.php">
    Hy Pera, enter your password:
    <input type="password" name="password">

    <input type="hidden" name="username" value="pera.peric">
</form>
```

Hy Pera, enter your password: ●●●●●●

BIT

Exercise

Labels

- <label> element
- Associates text with some form element
- Two ways of usage:
  - Wrapping element
  - Referencing element using the **for** attribute

```html
<label>Age: <input type="text" name="age"></label>

<br/>

Gender:
<input id="female" type="radio" name="gender" value="f">
<label for="female">Female</label>
<input id="male" type="radio" name="gender" value="m">
<label for="male">Male</label>
```

Age: [   ]
Gender: ◯ Female ◯ Male

Grouping Form Elements

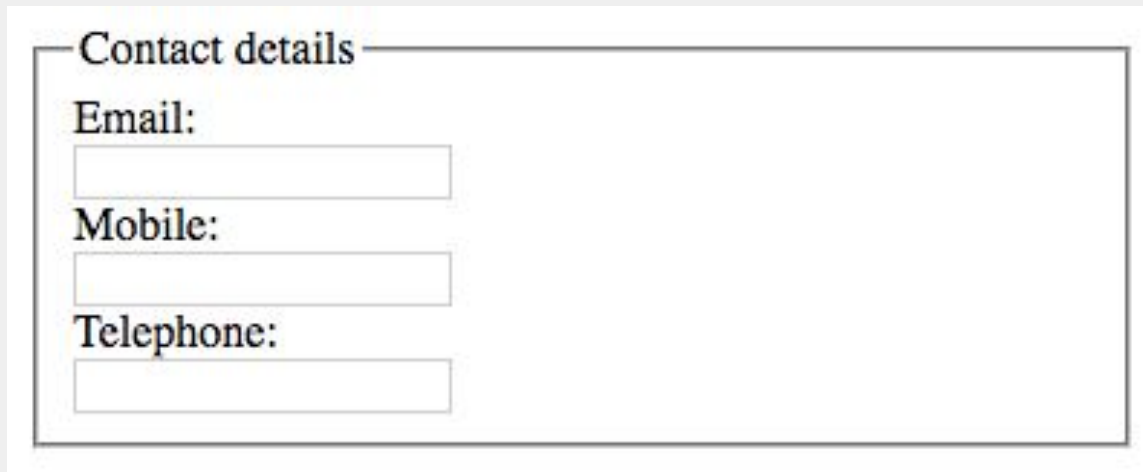- <fieldset> as the parent element
- <legend> is used for defining

 the name

```
<fieldset>
    <legend>Contact details</legend>

    <label>
        Email:<br>
        <input type="text" name="email">
    </label>


    <br>


    <label>Mobile:<br>
        <input type="text" name="mobile">
    </label>


    <br>


    <label>
        Telephone:<br />
        <input type="text" name="telephone">
    </label>
</fieldset>
```

┌─Contact details──────────────────┐
│ Email: │
│ [   ]   │
│ Mobile: │
│ [   ]   │
│ Telephone: │
│ [   ]   │
└──────────────────────────────────┘

BIT

Exercise

Form Validation (HTML5)

B I T

- HTML validation without JS code
- Field cannot be empty (required)

```
<form action="http://www.example.com/login/" method="post">
    <label for="username">Username:</label>
    <input type="text" name="username" required>


    <br>

    <label for="password">Password:</label>
    <input type="password" name="password" required>


    <input type="submit" value="Submit" />
</form>
```

Username: pera
Password: [   ] Submit

! Please fill out this field.

Date Input (HTML5)

- <input> element with type="**date**"
- Provides consistent structure of user input
- Text input field will be used if date is not supported

```
<form action="http://www.example.com/bookings/" method="post">
    <label for="username">Departure date:</label>
    <input type="date" name="depart" />

    <input type="submit" value="Submit" />
</form>
```

Departure date: 02/03/2015 ⊗ ↕ ▼ Submit

Email Input (HTML5)

- <input> with type="**email**"
- Checks for a valid **structure** of an email address

```
<form action="http://www.example.org/subscribe.php">
    <p>Please enter your email address:</p>
    <input type="email" name="email" />

    <input type="submit" value="Submit" />
</form>
```

Please enter your email address:

pera@.com Submit

⚠ ':' is used at a wrong position in '.com'.

URL Input (HTML5)

- <input> with type="**url**"
- Checks for a valid **structure** of a URL address

```
<form action="http://www.example.org/profile.php">
    <p>Please enter your website address:</p>
    <input type="url" name="website">

    <input type="submit" value="Submit">
</form>
```

Please enter your website address:

pera@gmail.com   Submit

! Please enter a URL.

Search Input

- \<input> element with type="**search**"
- Provides option for resetting field content

BIT

Exercise

Summary

- Whenever you want to collect information from users, you will need a form, that lives inside the **<form>** element.

- Information from a form is sent in name/value pairs.

- Each form control is given a name, and the text the user types in or the values of the options they select are sent to the server.

- HTML5 introduces new form elements that make it easier for users to fill in forms.

References

- Nativni form elementi - https://goo.gl/uHyhmU
- POST vs GET - https://goo.gl/7qckVh