

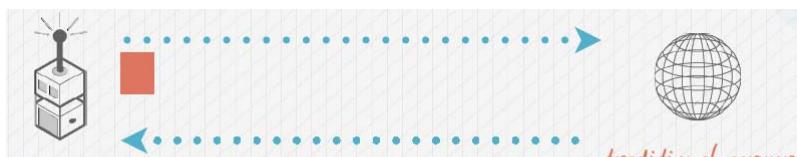


socket.io

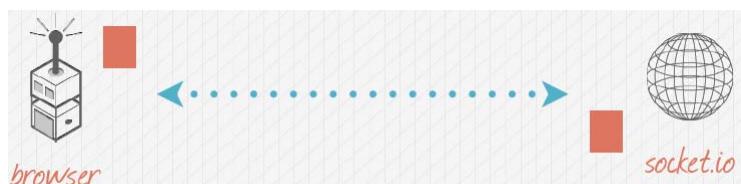
MODULE 11

SOCKET.IO

WEBSOCKETS



Traditional request/response cycle



Using duplexed websocket connection

SOCKET.IO FOR WEB SOCKETS

- > Abstracts websockets with fallbacks

```
$ npm install socket.io
```

```
var socket = require('socket.io');
var app = express.createServer();
var io = socket.listen(app);

io.sockets.on('connection', function(client) {
  console.log('Client connected...');
});
```

app.js

SOCKET.IO FOR WEB SOCKETS

- > Client-side

```
<script src="/socket.io/socket.io.js"></script>
<script>
  var server = io.connect('http://localhost:8080');
</script>
```

index.html

SENDING MESSAGES TO CLIENT

```
io.sockets.on('connection', function(client) {  
    console.log('Client connected...');
```

```
emit the 'messages' event on the client  
client.emit('messages', { hello: 'world' });  
});
```

```
<script src="/socket.io/socket.io.js"></script>
<script>
  var server = io.connect('http://localhost:8080');
  server.on('messages', function (data) {
    alert(data.hello);
  });
</script>
```

index.html

listen for 'messages' events

SENDING MESSAGES TO SERVER

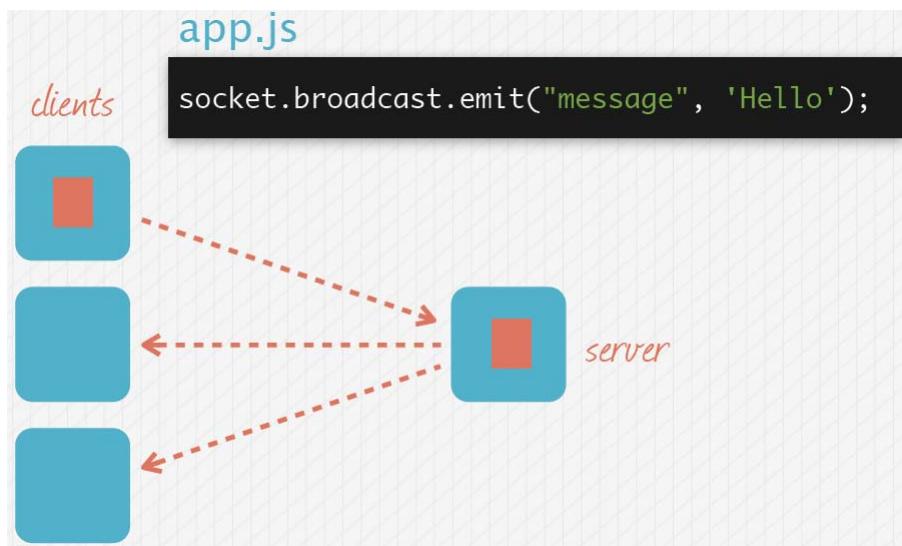
```
io.sockets.on('connection', function(client) {  
    client.on('messages', function (data) {  
        console.log(data);  
    });  
});  
listen for 'messages' events
```

```
<script>
  var server = io.connect('http://localhost:8080');

  $('#chat_form').submit(function(e){
    var message = $('#chat_input').val();
    emit the 'messages' event on the server
    socket.emit('messages', message);

  });
</script>
```

BROADCASTING MESSAGES



BROADCASTING MESSAGES

```
io.sockets.on('connection', function(client) {  
    client.on('messages', function (data) {  
        client.broadcast.emit("messages", data);  
    });  
    broadcast message to all other clients connected  
});
```

```
<script>
  ...
  server.on('messages', function(data) { insertMessage(data) });
</script>
```

insert message into the chat

SAVING DATA ON THE SOCKET

```
io.sockets.on('connection', function(client) {           app.js
  client.on('join', function(name) {
    client.set('nickname', name);   set the nickname associated
  });                                with this client
});
```

```
<script>
  var server = io.connect('http://localhost:8080');      index.html
  server.on('connect', function(data) {
    $('#status').html('Connected to chat');
    nickname = prompt("What is your nickname?");

    server.emit('join', nickname);  notify the server of the
  });                                users nickname
</script>
```

SAVING DATA ON THE CLIENT

```
io.sockets.on('connection', function(client) {           app.js
  client.on('join', function(name) {
    client.set('nickname', name);   set the nickname associated
  });                                with this client
  client.on('messages', function(data){
    get the nickname of this client before broadcasting message
    client.get('nickname', function(err, name) {
      client.broadcast.emit("chat", name + ": " + message);
    });                                broadcast with the name and message
  });
});
```