

AJAX Basics

```
xhr = new XMLHttpRequest();  
xhr.onreadystatechange = xhrHandler;  
xhr.open("POST", url);  
xhr.send(postData);
```

```
...
```

```
function xhrHandler() {  
    if (this.readyState != 4) {  
        return;  
    }  
    if (this.status != 200) {  
        // Handle error ...  
        return;  
    }  
}
```

```
...
```

```
var text = this.responseText;  
}
```

State 4 means "done"



Raw text of response
(also available as XML)



JSON

```
{name: "Alice", gpa: 3.5,  
  friends: ["Bill", "Carol", "David"]}
```

JSON Example

- **Controller code:**

```
Class StudentsController < ApplicationController
  def get_students
    @students = Student.all
    render json: @students;
  end
end
```

```
[{"advisor_id":"2","birth":"1987-10-22",
  "gpa":3.9,"grad":2009,"id":1,
  "name":"Anderson"},
 {"advisor_id":"1","birth":"1990-04-16",
  "gpa":3.1,"grad":2012,"id":2,
  "name":"Jones"},
  ...
]
```

JSON
Output



- **Javascript in browser:**

```
var students = JSON.parse(xhr.responseText);
element.innerHTML = students[1].name;
```

AJAX response
(from XMLHttpRequest object)



