



Javascript · node ·

express · git · github ·

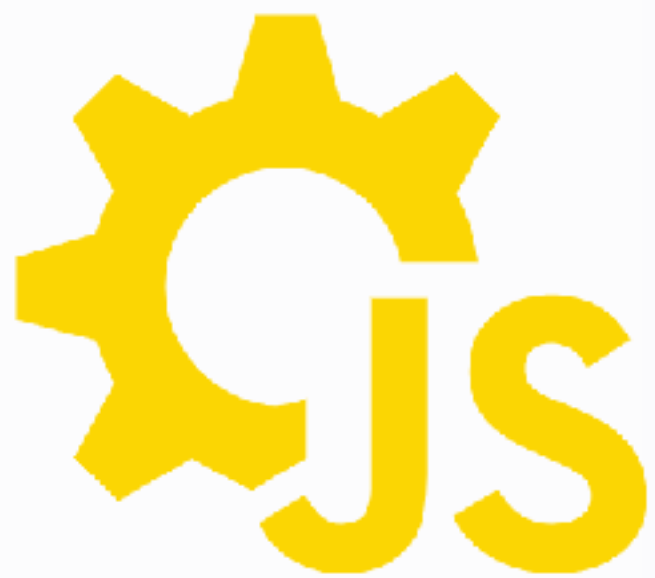
glitch



## Overview of the modules topics

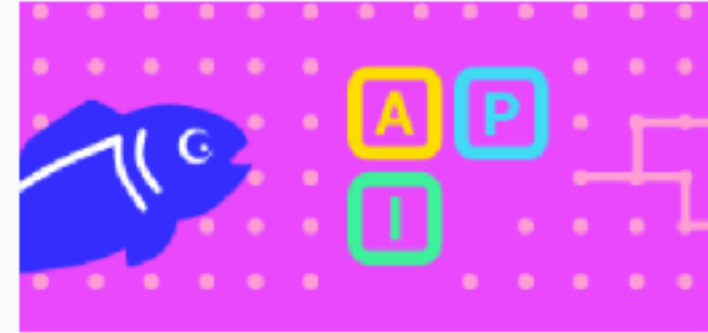
# Module Topics

## Web Development II



Javascript · node ·  
express · git · github ·  
glitch

### 1: Introducing Javascript



An introduction to the very basics of the Javascript Language

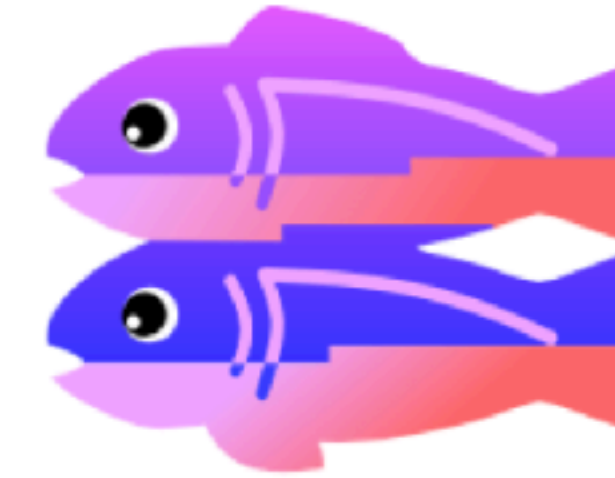
### 2: Javascript Arrays

	myCar	
0	Chev	
1	Ford	
2	Buick	
3	Lincoln	
4	Truck	

Comparison of an array to a column of data

Exploring Javascript arrays in detail

### 3: Glitch Overview



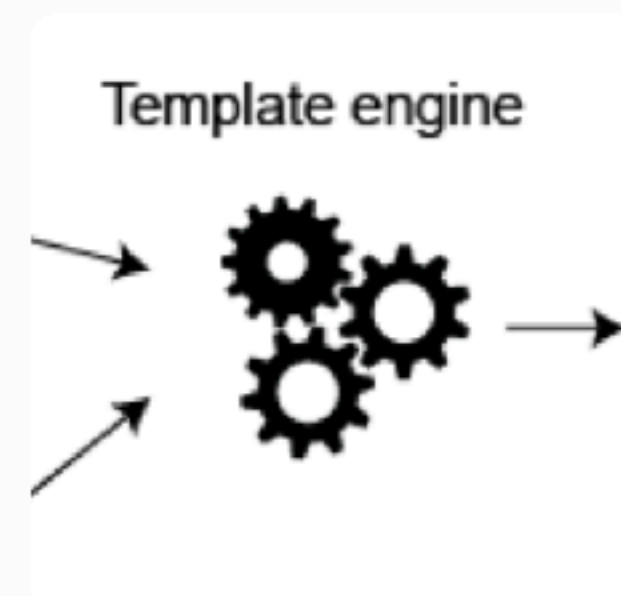
Overview of the module + introduction to the Glitch platform

### 4: Web Applications



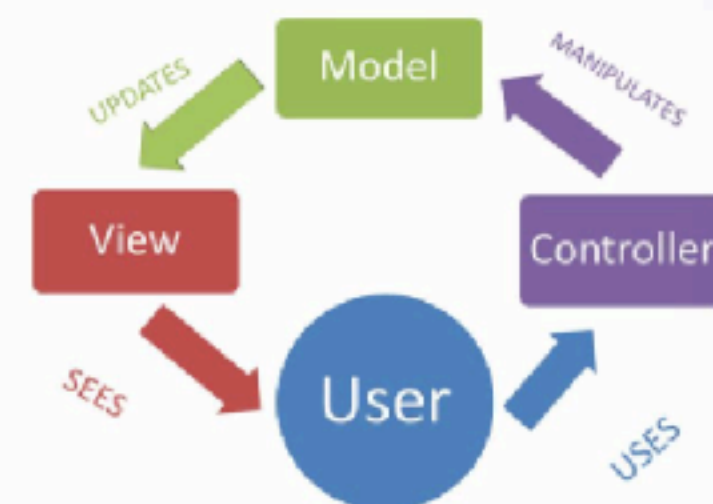
Build your first Glitch app, a simple static playlist web site.

### 5: Templates & Routes



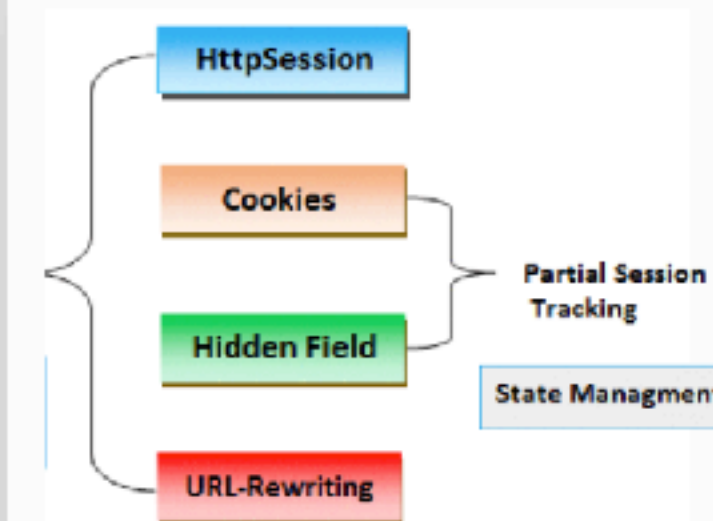
Explore templating in more detail. Enhanced the routing behaviour

### 6: Forms



Display a form, accept user input.

### 7: Sessions




Implement user account management using sessions.

### 08: APIs



Weather · APIs · Charts

## 1: Introducing Javascript



An introduction to the very basics of the Javascript Language

## Introducing Javascript



### Module Overview



Overview of the modules topics

### JS Introduction



JavaScript

Place javascript in its proper context, and explore its relationship t...

### Variables & Logic



Explore the javascript variables, including the basic types, conversion...

### Const, Let & Objects



Using const & let. Declaring and using objects.

### Lab-01 JS Intro

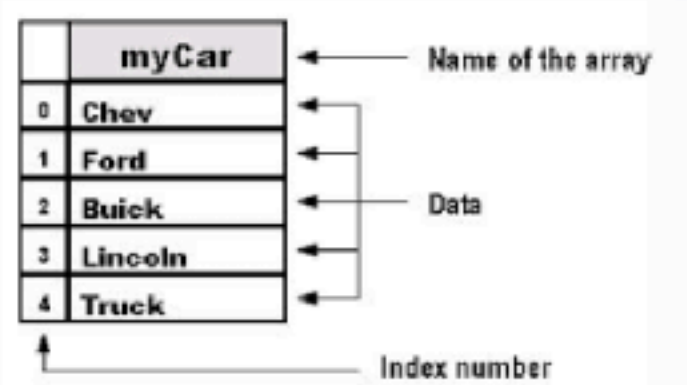


Background & Tools, Variables & Boolean Logic





2: Javascript Arrays



Comparison of an array to a column of data

Exploring Javascript arrays in detail

Variables & Objects  
Review

A concise tour of the structure of variables & objects in Javascript

Methods & Arrays  
Review

```
meow: function () {  
  console.log(this.sound);  
  return this.age;  
},
```

A concise look at methods & Arrays

Javascript Arrays



Arrays: Basics

Creating, accessing, adding to and removing from arrays.

Array Methods

Exploring length, slice, concat, join, indexOf, lastIndexOf

Array Iteration

Using for, while and do-while to iterate over an array

Arrays of Objects

Arrays of more complex data structures, including nested objects.

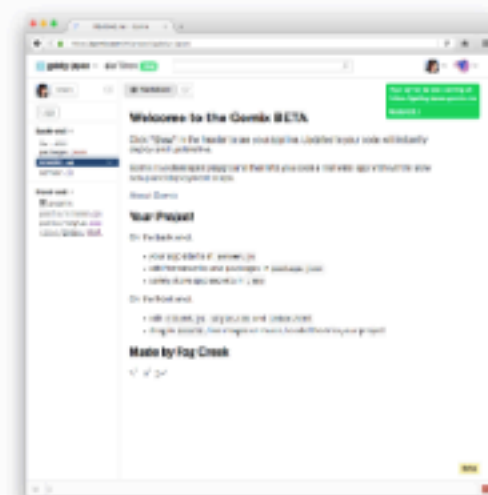
Lab-02 JS Arrays

Array Basics, Array Methods & Iteration



## Introducing Glitch

### Introducing Glitch



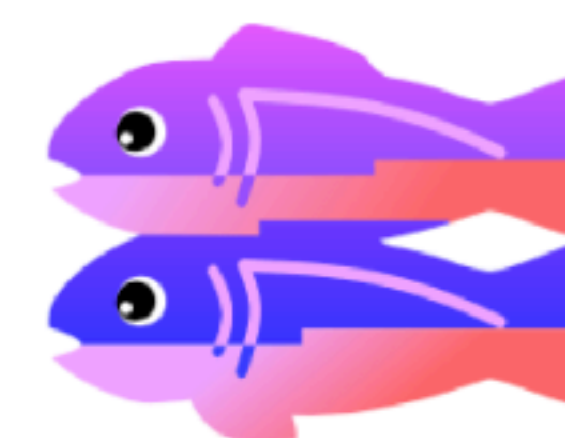
What is is, what role it plays, why was it built.

### Guided Tour



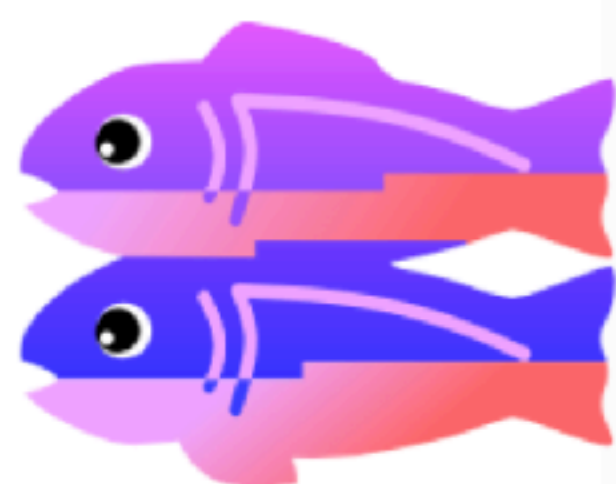
A look at at the components of a glitch project. Also the types o...

### Lab-03a Glitch Intro



Create, modify and view your first Glitch project.

### 3: Glitch Overview

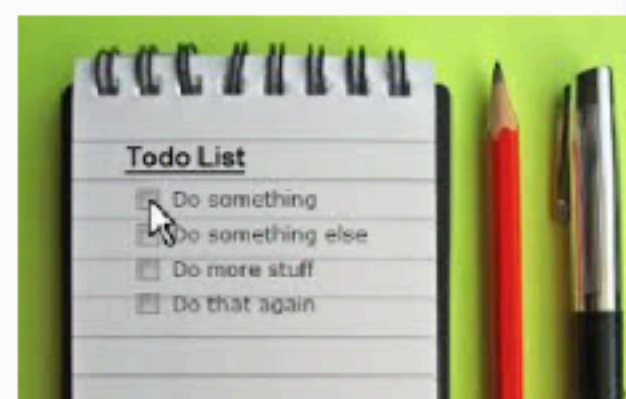


Overview of the module + introduction to the Glitch platform

## Glitch Deep Dive



### Lab-03b Todo 1



Create a Todo application in Glitch

### Lab-03c Todo 2




Incorporate IDs into the todo model

### Lab-03d Todo 3



Incorporate Sessions / User accounts into Todo

### 4: Web Applications



Build your first Glitch app, a simple static playlist web site.

## Playlist 1



<h3>Web App Introduction</h3>  <p>Structure of a web app: Front-end Vs Backend. Routers, Models, Views,...</p>	<h3>Front-end</h3>  <p>Views: Handlebars layouts, partials and templates</p>	<h3>Modules</h3>  <p>The backend will use a modular approach, relying on specific mechanism t...</p>
<h3>Back-end</h3>  <p>Server, routes + controllers</p>	<h3>Lab-04a Playlist 1</h3>  <p>Import and run a new starter project. Extend this project to include...</p>	<h3>Lab-04b WebStorm</h3>  <p>Using WebStorm instead of Glitch for Web App development</p>



## 5: Templates & Routes

### Template engine



Explore templating in more detail. Enhanced the routing behaviour

### Templates

#### Template engine



Templates enable dynamic composition of views from layouts,...

### Json

```
"playlistCollection": [
  {
    "title": "Beethoven Sonatas",
    "songs": [
      {
        "title": "Piano Sonata No. 3",
        "artist": "Beethoven"
      },
      {
        "title": "Piano Sonata No. 7",
        "artist": "Beethoven"
      },
      {
        "title": "Piano Sonata No. 10",
        "artist": "Beethoven"
      }
    ]
  }
]
```

JSON is notation for representing javascript objects in a simple literal..

## Controller, Routes & Models

### Dashboard

Beethoven Sonatas	
Song	Artist
Piano Sonata No. 3	Beethoven
Piano Sonata No. 7	Beethoven
Piano Sonata No. 10	Beethoven
Beethoven Concertos	
Song	Artist
Piano Concerto No. 0	Beethoven
Piano Concerto No. 4	Beethoven
Piano Concerto No. 5	Beethoven

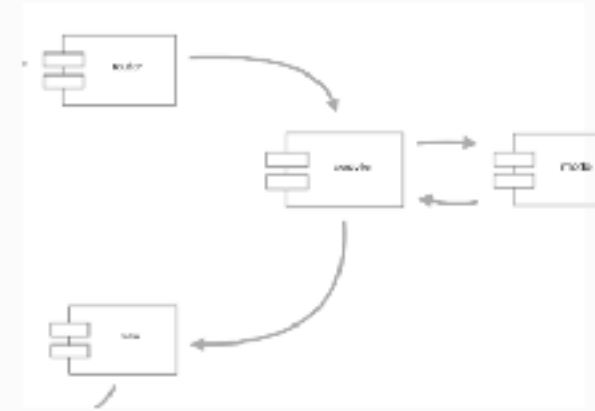
Review the dashboard controller in detail.

### Playlist

Beethoven Sonatas	
Song	Artist
Piano Sonata No. 3	Beethoven
Piano Sonata No. 7	Beethoven
Piano Sonata No. 10	Beethoven

Revise the Dashboard to render playlist without their contents. Use a ne...

### MVC

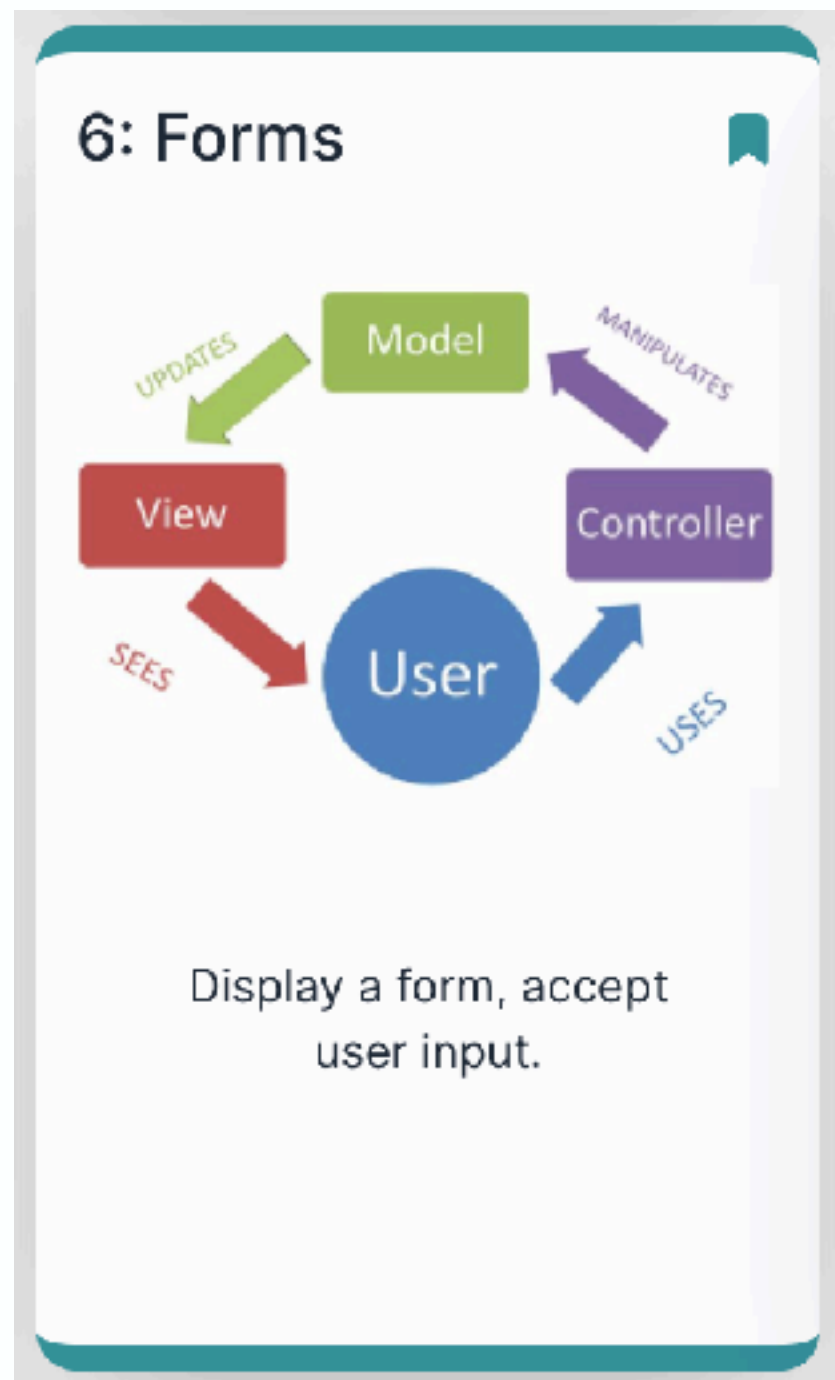


Explore the MVC Pattern in action in Playlist 2

### Lab-05 Playlist 2



Refactor the dashboard controller to show summary on of the...



## Forms

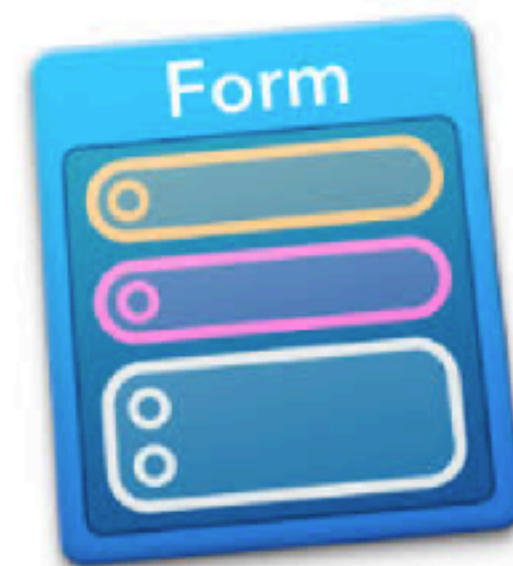


### Delete Song

Artist	
Beethoven	Delete Song
Beethoven	Delete Song
Beethoven	Delete Song

How to remove a song from the playlist

### Forms Design



How a form UI is laid out in HTML using Semantic UI

### Form Programming



How to accept user input from a form and process it in a controller

### Lab-06 Playlist 3



Enable Songs and Playlists to be added via simple forms.



## 7: Sessions

Implement user account management using sessions.

### Sessions Introduction

Common techniques for implementing sessions.

### Using Sessions

Refactor the application to support sessions

### Sessions UX

New forms needed to enable the user to signup / login

### Creating Sessions

The API to create, access and destroy sessions.

### Lab-07a Playlist 4

Introduce Sessions onto the Playlist application, enabling user accounts...

### Lab-07b Playlist 5

Implement a feature to update an existing Song

### Lab-07c Playlist 6

Find and display the shortest song in a Playlist.

08: APIs

Weather · APIs · Charts

Lab 08a

OpenWeatherMap

Create developer account and explore the API using the browser.

Lab 08b API Access

Retrieve latest weather report in javascript

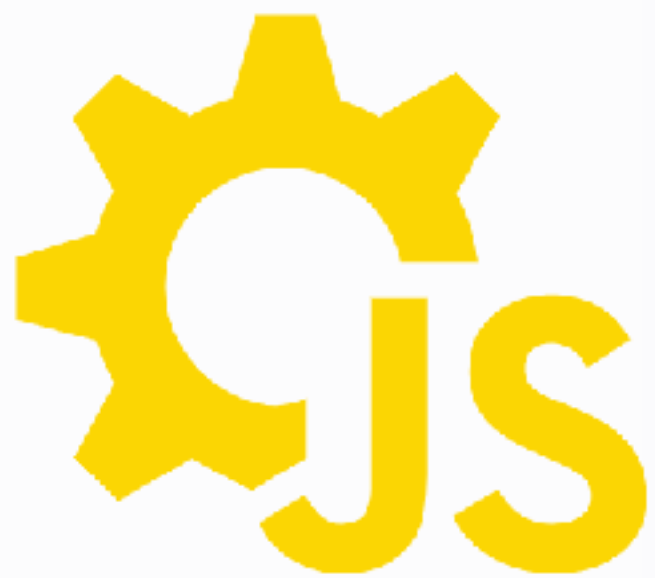
Lab 08c Charts

Display a simple trend chart

10

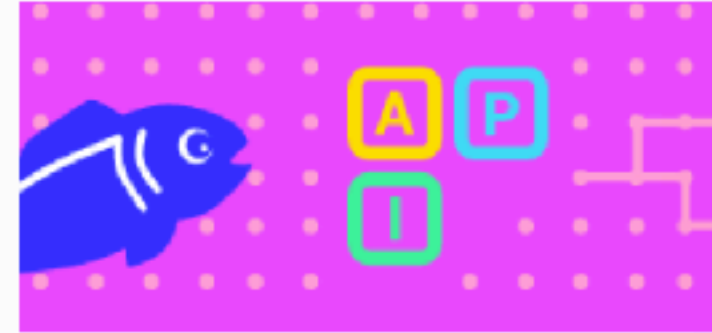
# Module Topics

## Web Development II



Javascript · node ·  
express · git · github ·  
glitch

### 1: Introducing Javascript



An introduction to the very basics of the Javascript Language

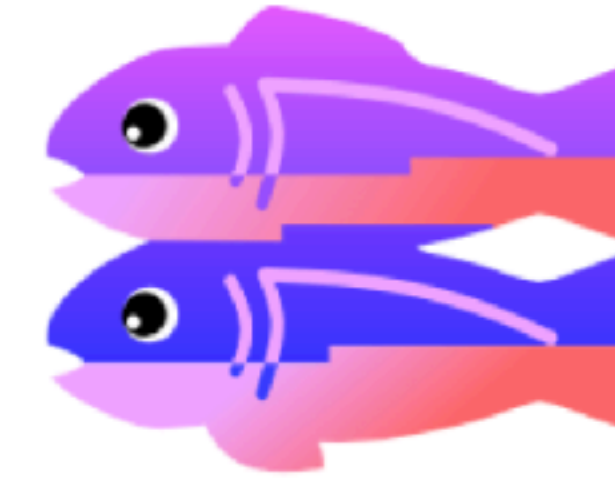
### 2: Javascript Arrays

	myCar		
0	Chev		
1	Ford		
2	Buick		
3	Lincoln		
4	Truck		

Comparison of an array to a column of data

Exploring Javascript arrays in detail

### 3: Glitch Overview



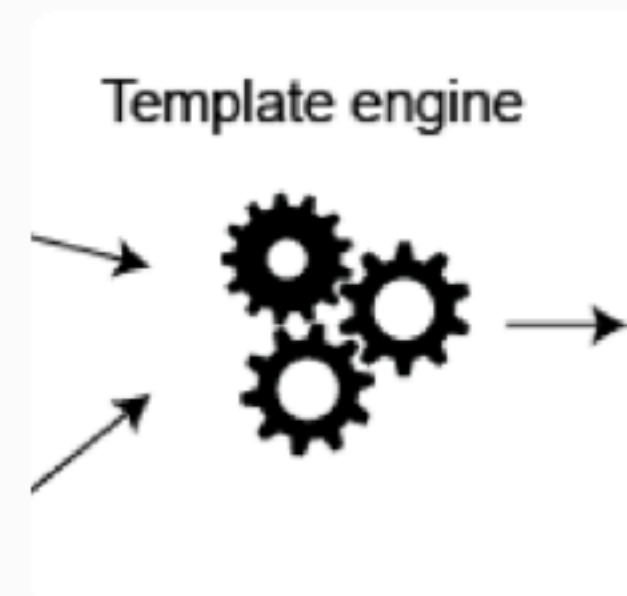
Overview of the module + introduction to the Glitch platform

### 4: Web Applications



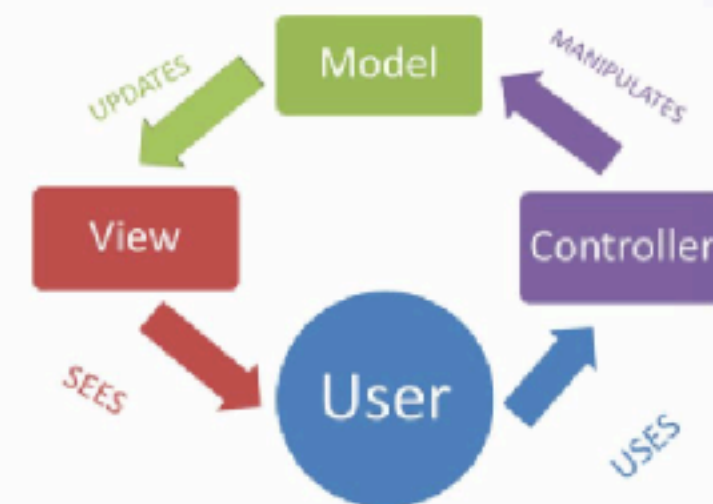
Build your first Glitch app, a simple static playlist web site.

### 5: Templates & Routes



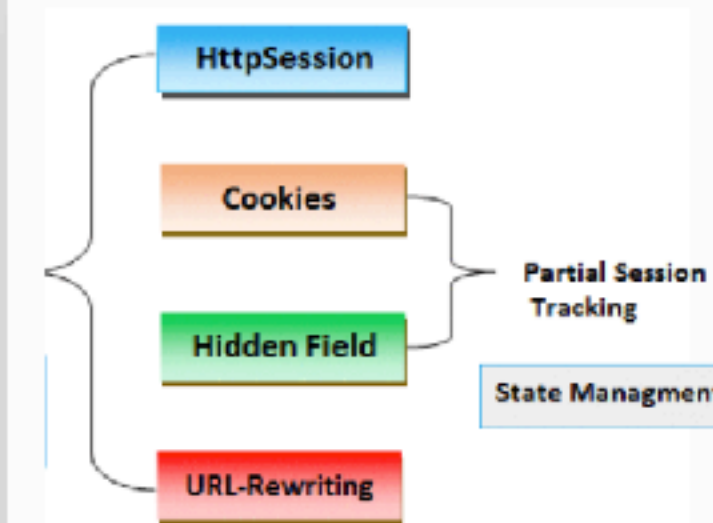
Explore templating in more detail. Enhanced the routing behaviour

### 6: Forms



Display a form, accept user input.

### 7: Sessions



Implement user account management using sessions.

### 08: APIs



Weather · APIs · Charts



# Module Overview



Overview of the modules topics