

# REACT FRONT-END FOR YOU DRUPAL 8 BACK-END

**BASSAM ISMAIL & ALIYA KHAN**

**FRONT-END | INTERMEDIATE**



# MARKETING 101



GitHub, Inc.

+

emberjs / ember.js

Watch

1,100

Star

16,851

<> Code

! Issues 192

🔗 Pull requests 85

📁 Projects 0

⚡ Pulse

📊 Graphs

Ember.js - A JavaScript framework for creating ambitious web applications <http://www.emberjs.com>

🕒 13,414 commits

🌿 44 branches

🏷 207 releases

👤 615 contributors

GitHub, Inc.

+

facebook / react

Watch

3,572

Star

50,245

<> Code

! Issues 557

🔗 Pull requests 125

📁 Projects 0

📖 Wiki

⚡ Pulse

📊 Graphs

A declarative, efficient, and flexible JavaScript library for building user interfaces. <https://facebook.github.io/react/>

🕒 7,225 commits

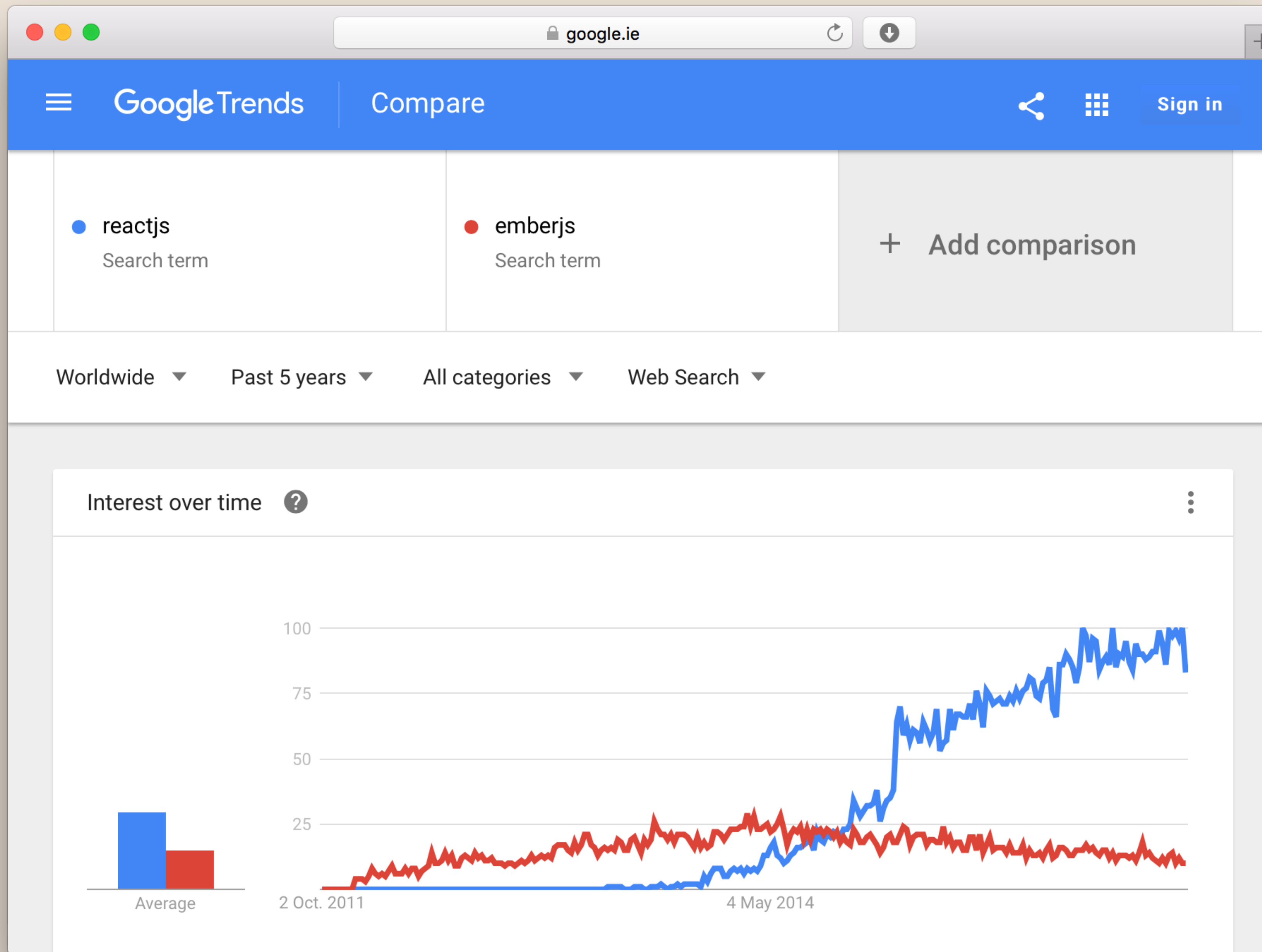
🌿 25 branches

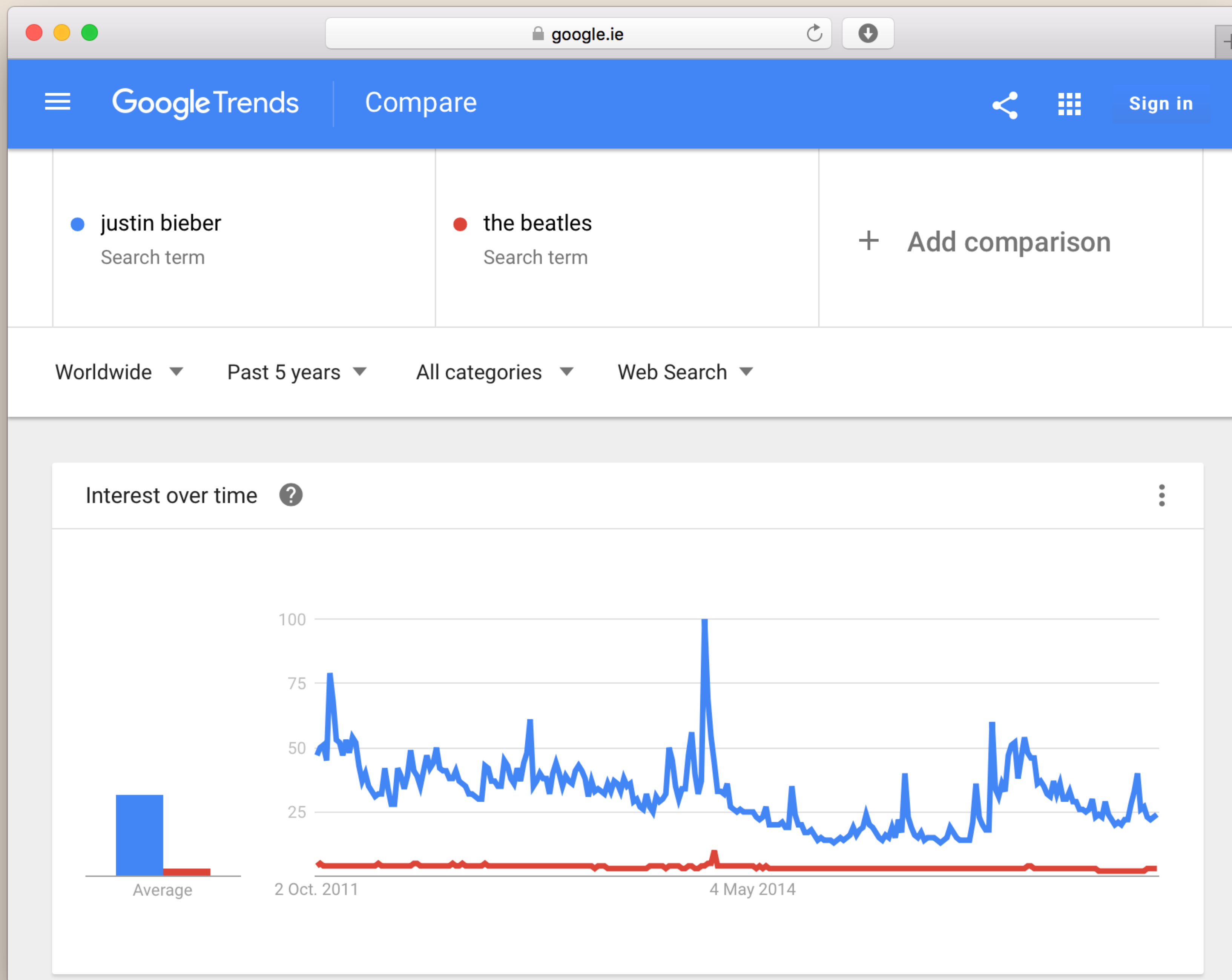
🏷 51 releases

👤 786 contributors

📄 BSD





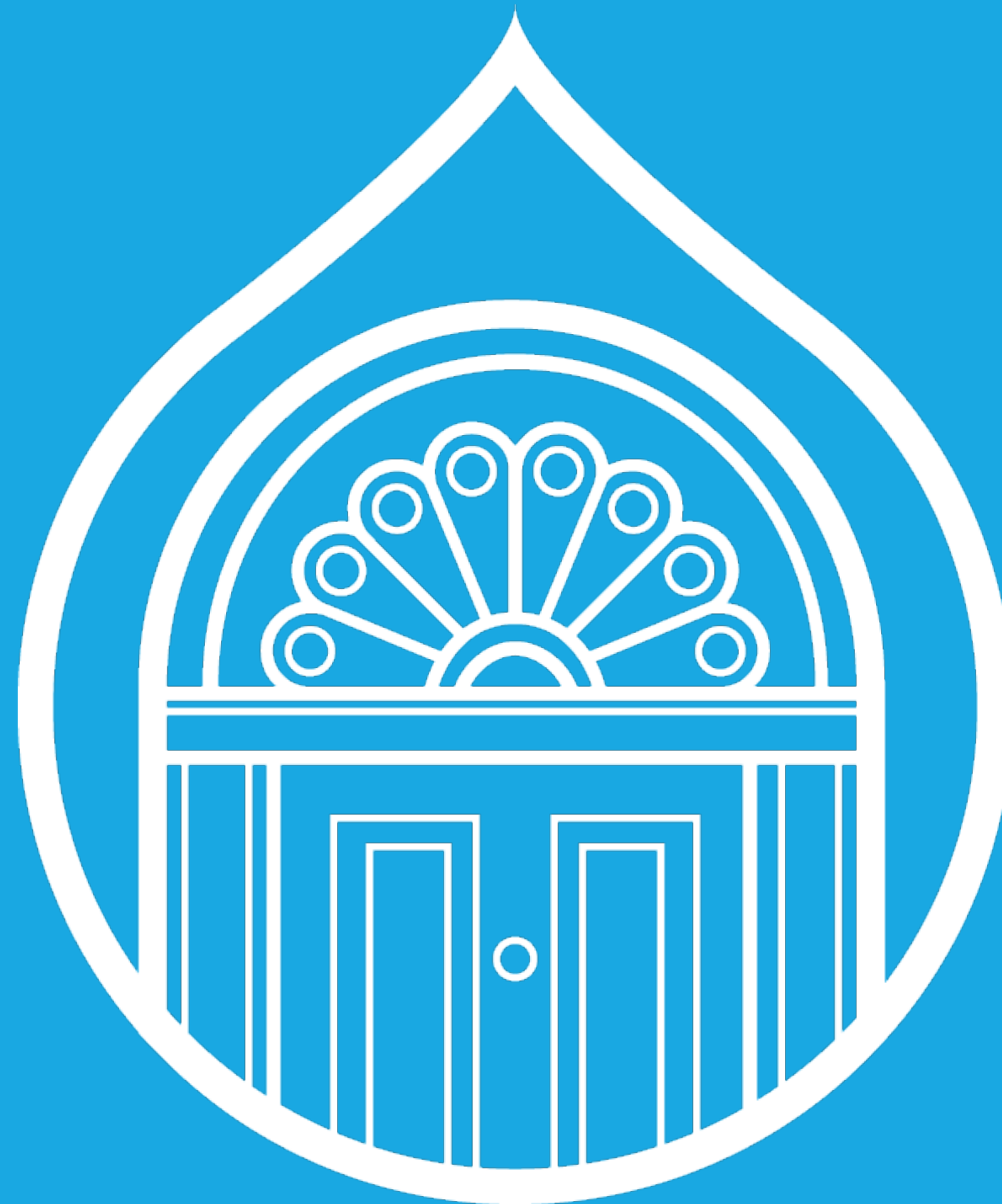




# DUBLIN

An aerial photograph of Dublin, Ireland, showing the River Liffey flowing through the city. The Ha'penny Bridge, a pedestrian suspension bridge, spans the river in the foreground. On the left bank, a busy street with cars and pedestrians is visible, along with modern buildings and a large crane. On the right bank, there are more modern buildings and a large industrial complex with tall chimneys in the background. The sky is blue with scattered white clouds. The word "DUBLIN" is overlaid in large, white, sans-serif capital letters across the center of the image.





DRUPALCON  
**DUBLIN**

# **“HOW TO BUILD A HEADLESS DRUPAL WEBSITE”**





**@SKIPPEDNOTE**  
**BASSAM.CO**

**Acquia**

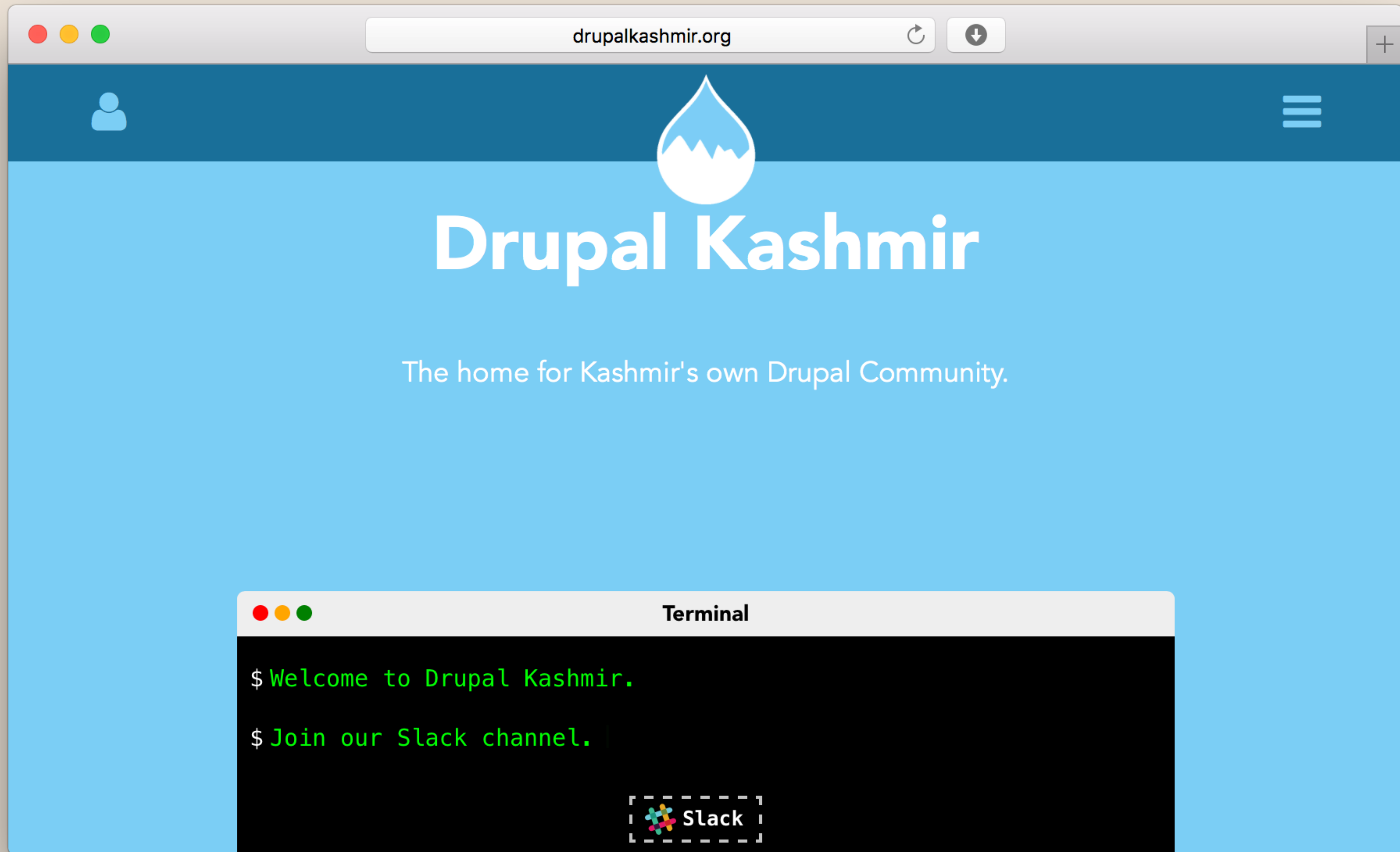




@ALIYA\_KHAN

















# AGENDA


- **EXPOSING DRUPAL**
- **REACT: BUILDING COMPOSABLE UIS**
- **REDUX: UNIDIRECTIONAL DATA FLOW**
- **REACT WITH DRUPAL**




**EXPOSING DRUPAL**










Home







**Jack Franklin** @Jack\_Franklin 11s  
Also I've been wanting to write some [@elmlang](#) blog posts and last night I registered [elmplayground.com](#)...watch this space!  






**Jack Franklin** @Jack\_Franklin 31s  
This is a periodic reminder that you should be using [@surge\\_sh](#) for deploying your frontend apps. It's crazy good & FREE!  




 Jack Franklin Retweeted




**Romain Piel** @\_rpiel 40m  
Always start your day with a good ol' Shift + Esc on Slack!  
 1  2







**Analytics for Apps** @fbanalytics Aug 23  
No one knows people like Facebook. Understand your app users' interests, education, age, gender and more.  





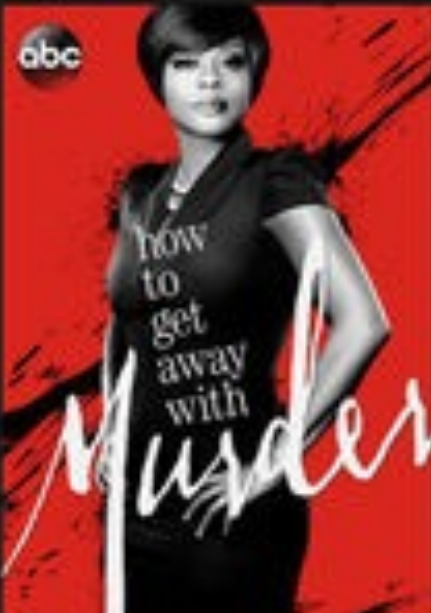
**NETFLIX**









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What's on your mind?  


**The Verge** 23 mins · 

Access the web from another country for free with [Opera's](#) new browser.  
  
**Opera's free VPN is now available in its main desktop browser**  
[theverge.com](#)  
 124 21 Shares 

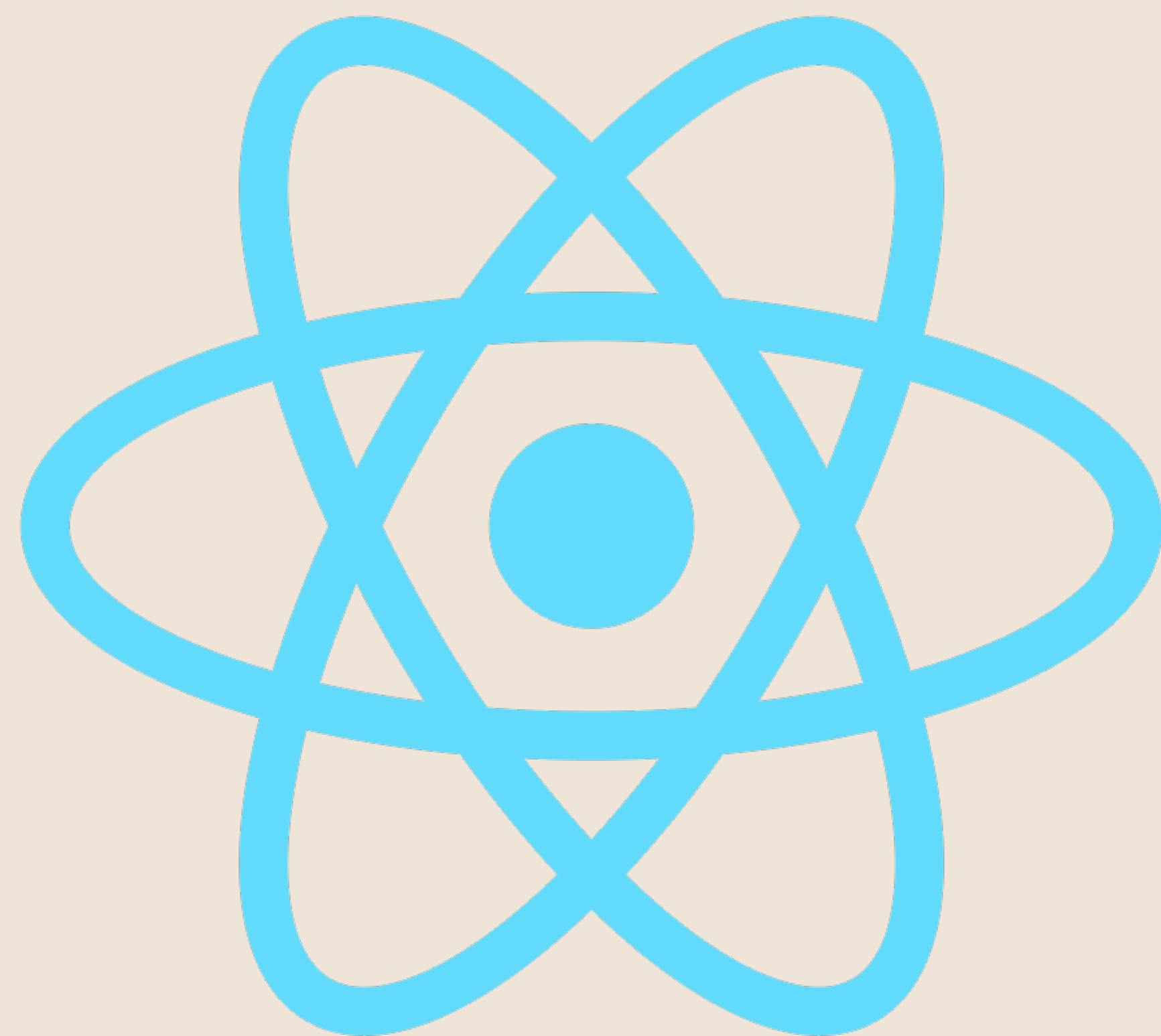
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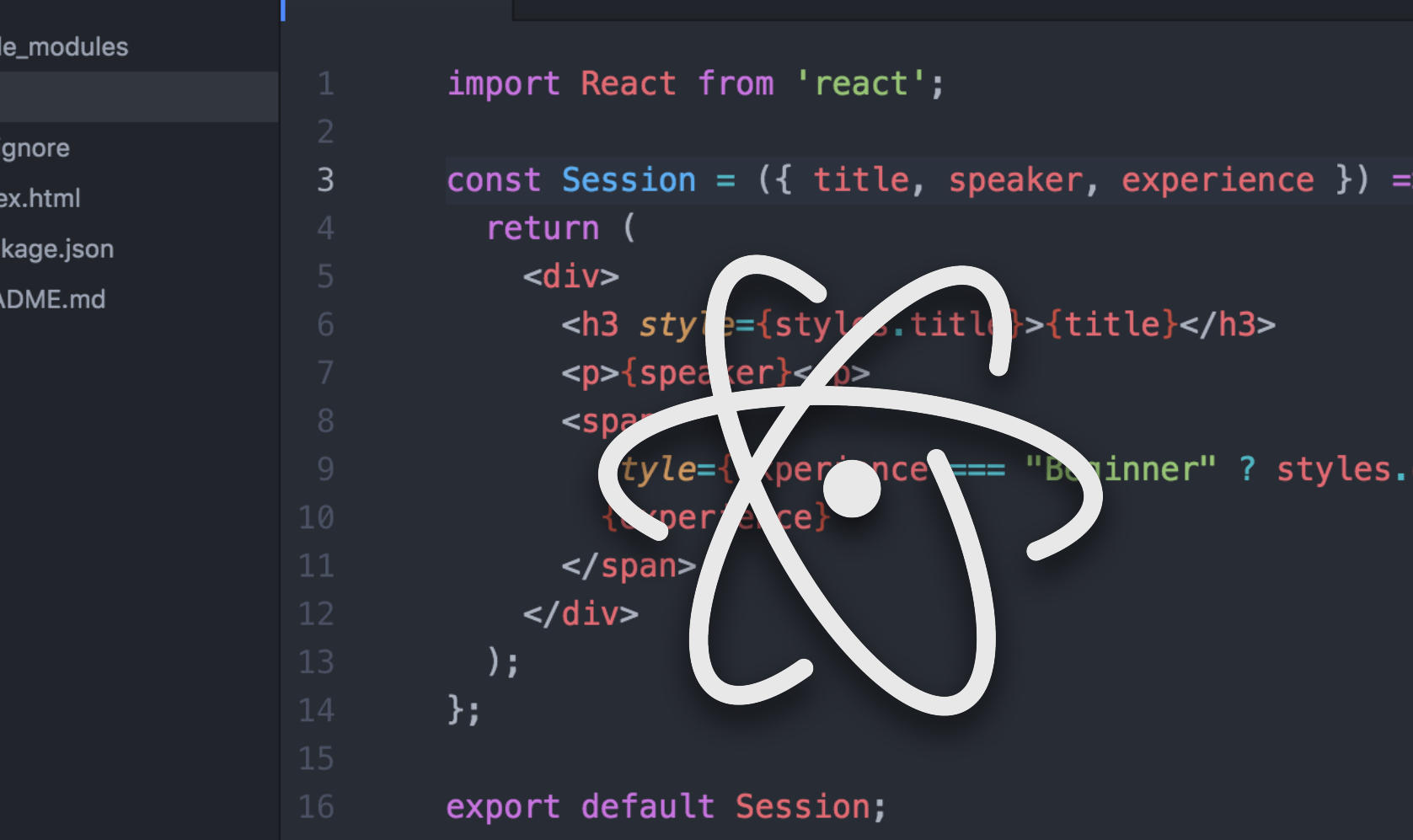
NETFLIX



**KHAN**  
ACADEMY

YAHOO!





The screenshot shows a code editor with a file explorer on the left and a code editor on the right. The file explorer shows a project structure with a 'samples' folder containing 'node\_modules', 'src', '.gitignore', 'index.html', 'package.json', and 'README.md'. The code editor shows a file named 'Session.js' with the following code:

```
1 import React from 'react';
2
3 const Session = ({ title, speaker, experience }) => {
4   return (
5     <div>
6       <h3 style={styles.title}>{title}</h3>
7       <p>{speaker}</p>
8       <span
9         style={experience === "Beginner" ? styles.easy : styles.hard}
10        >{experience}</span>
11     </div>
12   );
13 };
14
15 export default Session;
```

A large white React logo is overlaid on the code.

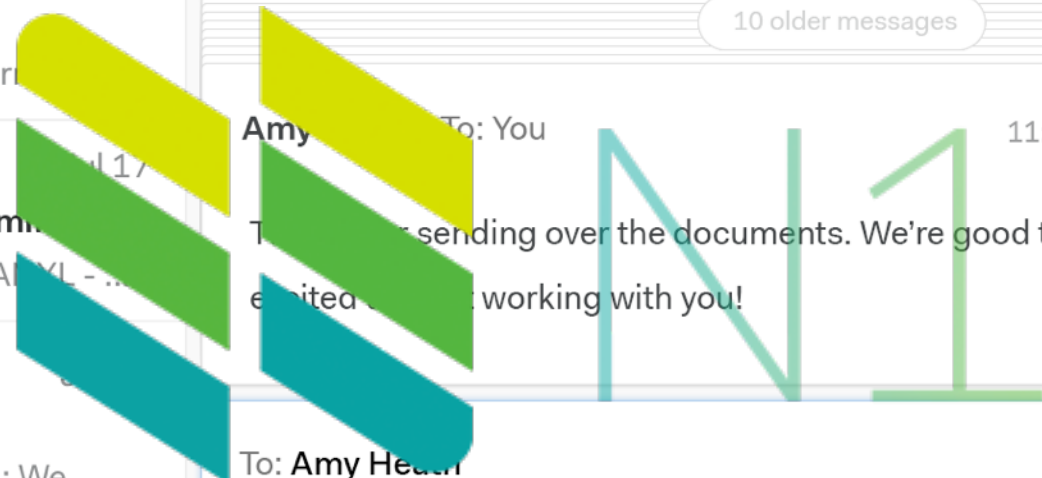
```

zsh

~
> ls
Applications  Downloads  Music      VirtualBox VMs
Counter.jsx   Dropbox    Pictures   code
Desktop       Library    Public     pure.jsx
Documents     Movies

~
> whoami
skippednote

~
> 
```



The screenshot displays the Nylas email application interface. On the left sidebar, the user's email address 'nora@nylas.com' is shown at the top, followed by an 'Inbox' with 3 messages. Below are sections for 'Unread', 'Starred', 'Important', ' Snoozed', 'Drafts' (2), 'Archive', 'Sent', 'Junk', and 'Trash'. A 'Folders' section lists 'Bills', 'Nylas-Internal', 'Nylas Trips', 'Travel', and 'Presentations'. The main pane shows a list of email threads. The top thread is from 'You, Amy Heath (11)' at 11:15 AM, titled 'ACME Company partnership', with a snippet 'Hey, I just wanted to share some ...'. Below it are threads from 'Logan Hoverboard Mfg.' (9:15 AM), 'Oceanic Airlines' (11:17 AM), 'Julie Ng' (11:15 AM), 'A. V. Brady' (Jul 16), and 'Marge Carelson' (Jul 16). The right pane shows the details of the selected email from Amy Heath, dated Jul 14, with the subject 'ACME Company partnership'. The email body contains the text 'Hey, just getting in touch because I wanted to get your thoughts on the process' and '10 older messages'. Below this is a reply from Amy Heath at 11:15 AM, with 3 opens, containing the text 'Hey Amy, That sounds perfect!'. The right sidebar shows the contact profile for Amy Heath, including her photo, name, email address 'amy@heathmail.com', social media links for Facebook, Twitter, and LinkedIn, her title 'Managing Editor, Wild Magazine', and her location 'Providence, RI'. At the bottom of the right sidebar is a table of recent messages: 'Re: Opportunities' (4/7), 'Phone call' (5/7), and 'Meeting' (3/7), with a 'Show all' link.

The screenshot shows a Jupyter Notebook interface with a title bar indicating the file path and Python version. The notebook is titled "Bamboo". The code in the first cell converts a Pandas DataFrame to GeoJSON and defines a function to plot it. The second cell shows the function being called. The output is a map of a city street grid with two blue location pins. The map includes labels for "Saint Mary's College High School" and "Northside".

```
[12]: import IPython
cols = ['street_address', 'issue_description', 'issue_type', 'ticket_status']
geojson = df.to_dict('geo', cols)

def plot_geo(geojson):
    IPython.display.HTML('applied to', geojson['street_address'], row=True)

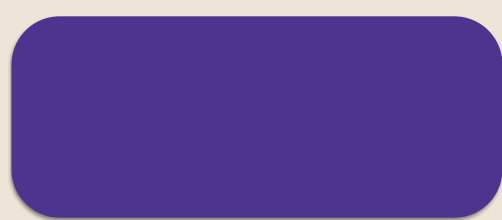
[22]: plot_geo(geojson)
```

**LIBRARY**



**FRAMEWORK**







```
import React from 'react';
```

```
const styles = {  
  title: {  
    fontSize: '1.25rem'  
  },  
  easy: {  
    color: '#848484'  
  },  
  hard: {  
    color: '#F44336'  
  }  
}
```

***Styling***



```
const Session = ({ title, speaker, experience }) => {  
  return (  
    <div>  
      <h3 style={styles.title}>{title}</h3>  
      <p>{speaker}</p>  
      <span  
        style={experience === "Beginner" ? styles.easy : styles.hard}>  
        {experience}  
      </span>  
    </div>  
  );  
};
```

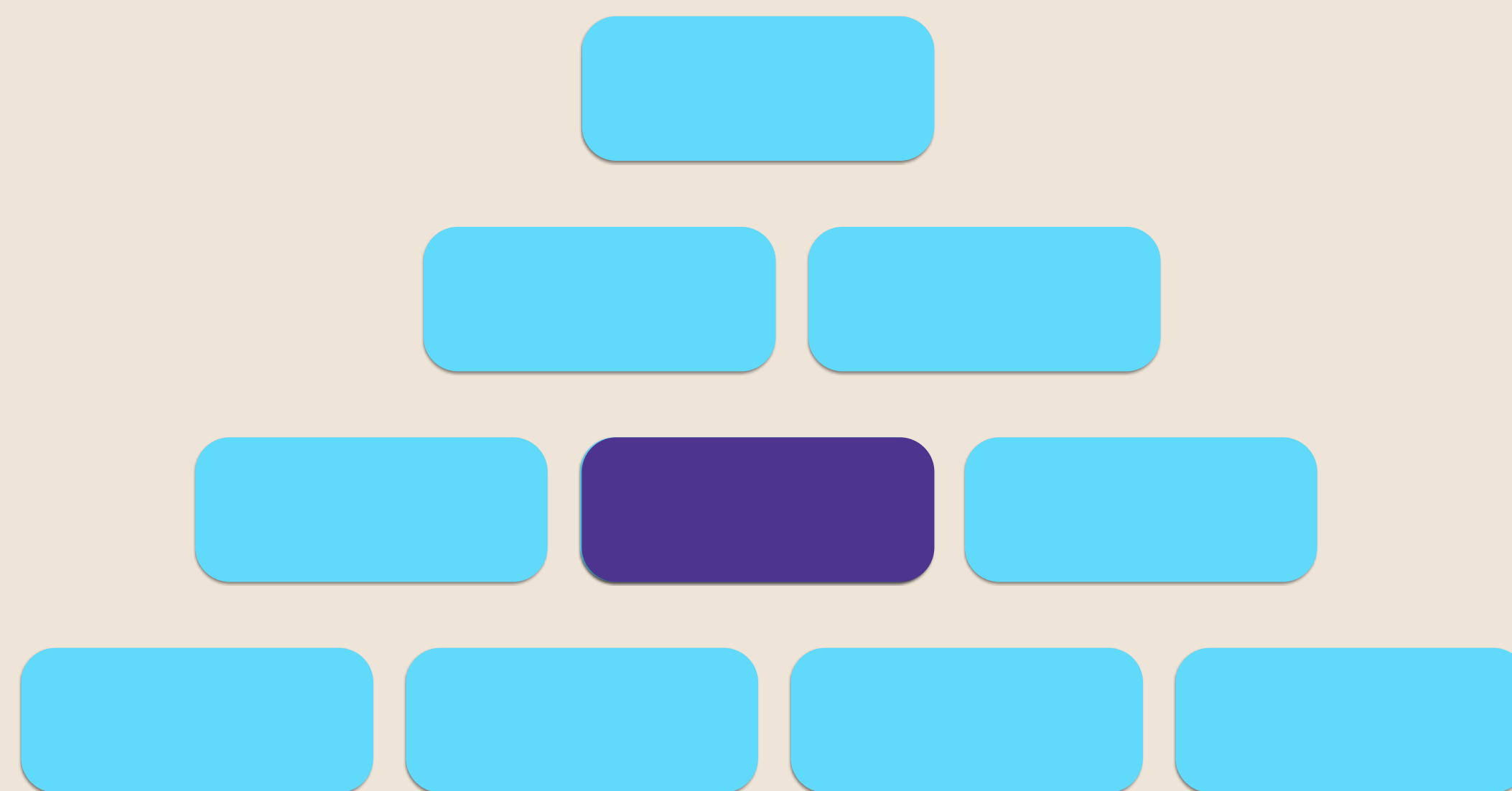
***Markup***



***UI Logic***



```
export default Session;
```





## Launching online stores with Commerce 2.x on Drupal 8

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rszrama, mglaman

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Liffey Meeting 1 | Johnson & Johnson EMEA Development Centre

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stevector

## Closing the Gaps: Prioritizing Accessibility in Custom Themes with Drupal 8

Liffey Meeting 2 | Amaze Labs

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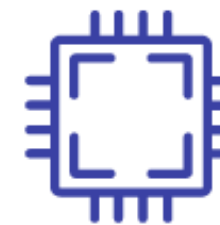


emarchak

## Documentation Is Getting An Overhaul

Liffey Meeting 4 | New Relic

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## Dream Team therapy or how to maintain humans within a team.

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# SESSION LIST

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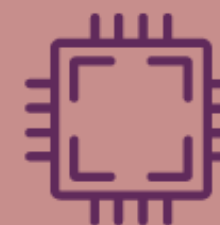


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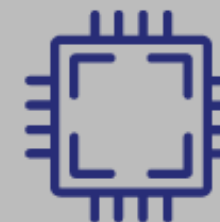


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# SESSION FIELDS

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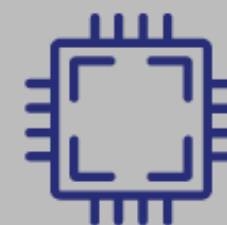


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# React Components



```
import React from 'react';
```

```
const Session = ({ title, speaker, experience }) => {
```

```
  return (
```

```
    <div>
```

```
      <h3>{title}</h3>
```

```
      <p>{speaker}</p>
```

```
      <span>{experience}</span>
```

```
    </div>
```

```
  )
```

```
};
```

```
export default Session;
```

**Pure Component**

**Destructured Props**

```
props = {
```

```
  title: "React & Drupal",
```

```
  speaker: "Bassam",
```

```
  experience: "Intermediate"
```

```
}
```



**REACT COMPONENT**



$$f(state) = UI$$



**UI IS FUNCTION OF THE APPLICATION STATE**

```
import React, { Component } from 'react';
```

```
class Session extends Component {  
  constructor(props) {  
    super(props);  
    this.click = this.click.bind(this);  
  }  
  
  componentWillMount() {}  
  
  componentDidMount() {}  
  
  click() {}  
  
  render() {  
    return (  
      <div onClick={this.click}>  
        <h3>{title}</h3>  
        <p>{speaker}</p>  
        <span>{experience}</span>  
      </div>  
    )  
  }  
}
```

**STATE AND BINDINGS**



**LIFECYCLE METHODS**



***Event* HANDLERS**



**NO MUTATIONS  
(VDOM)**



```
export default Session;
```



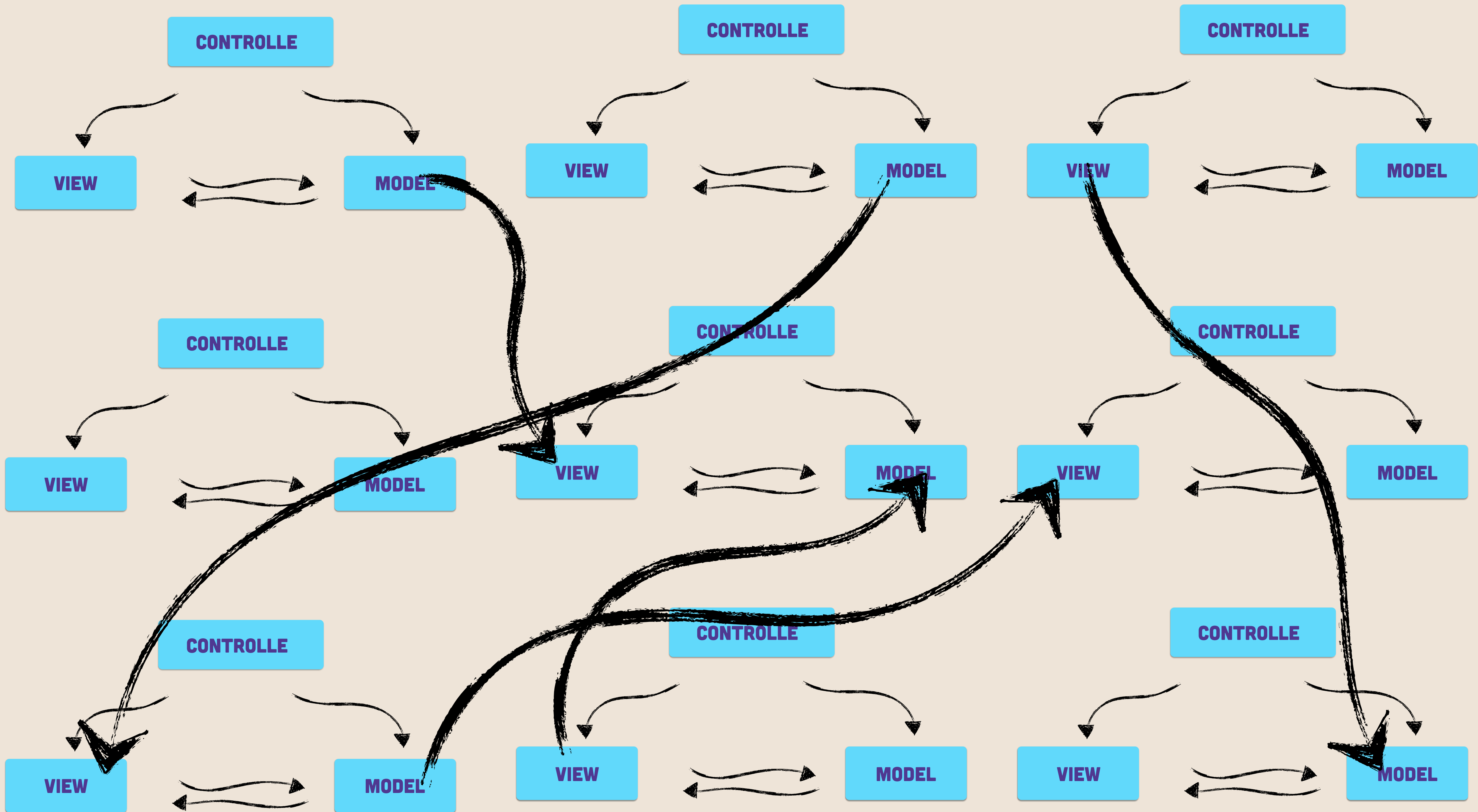
# MVC

**CONTROLLER**

**VIEW**

**MODEL**

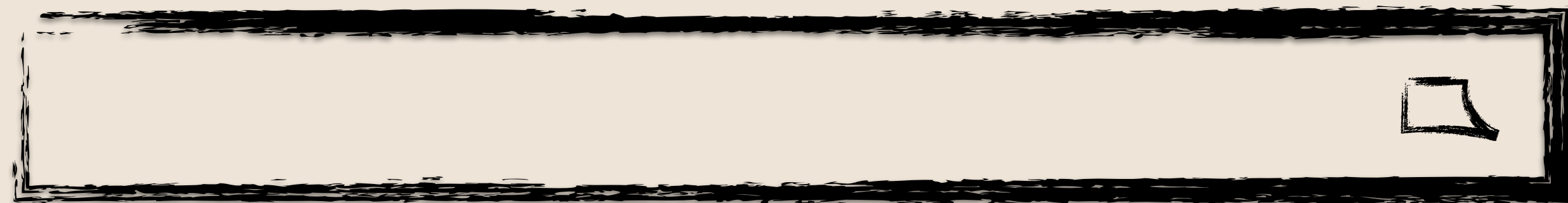
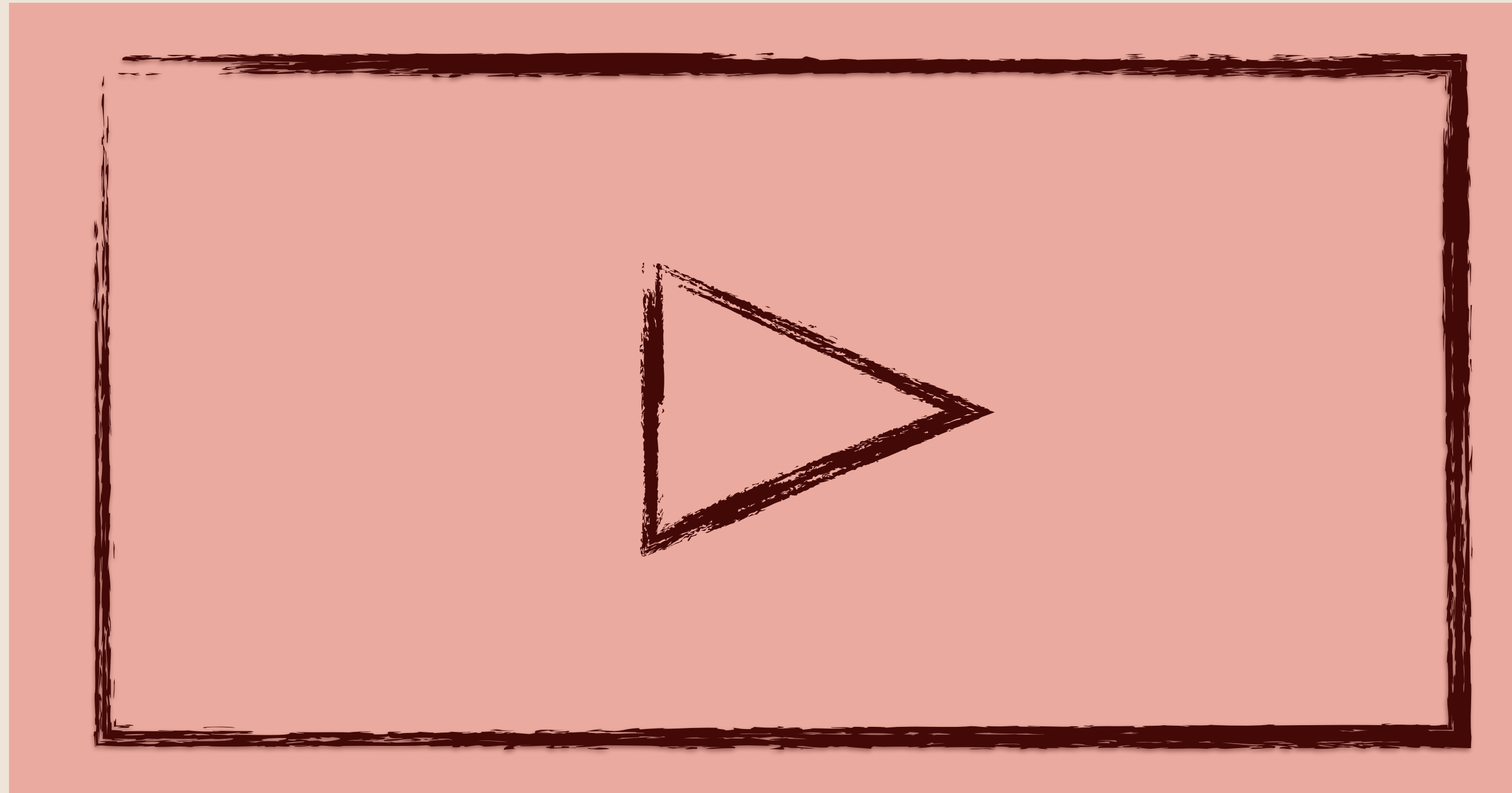
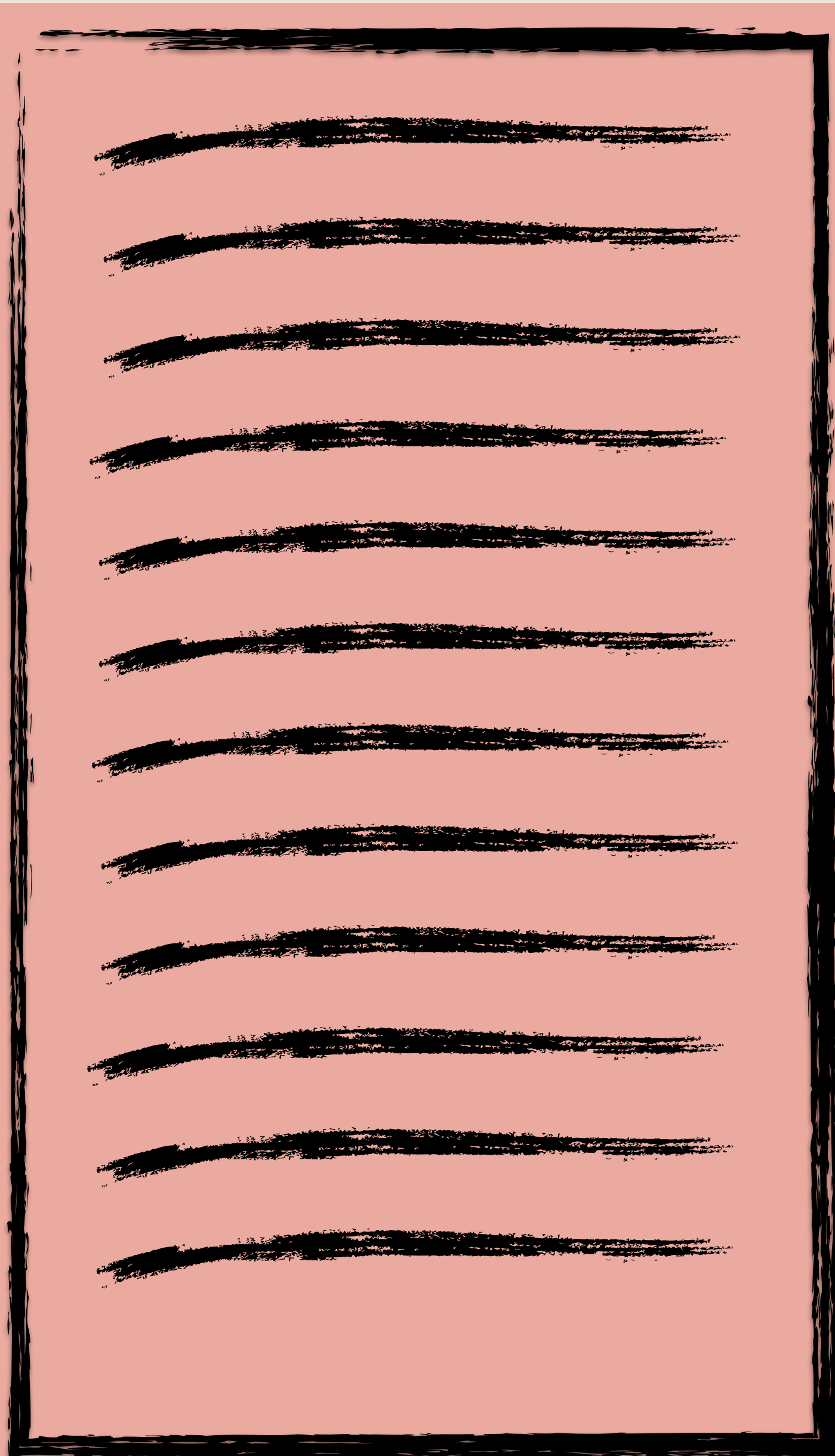








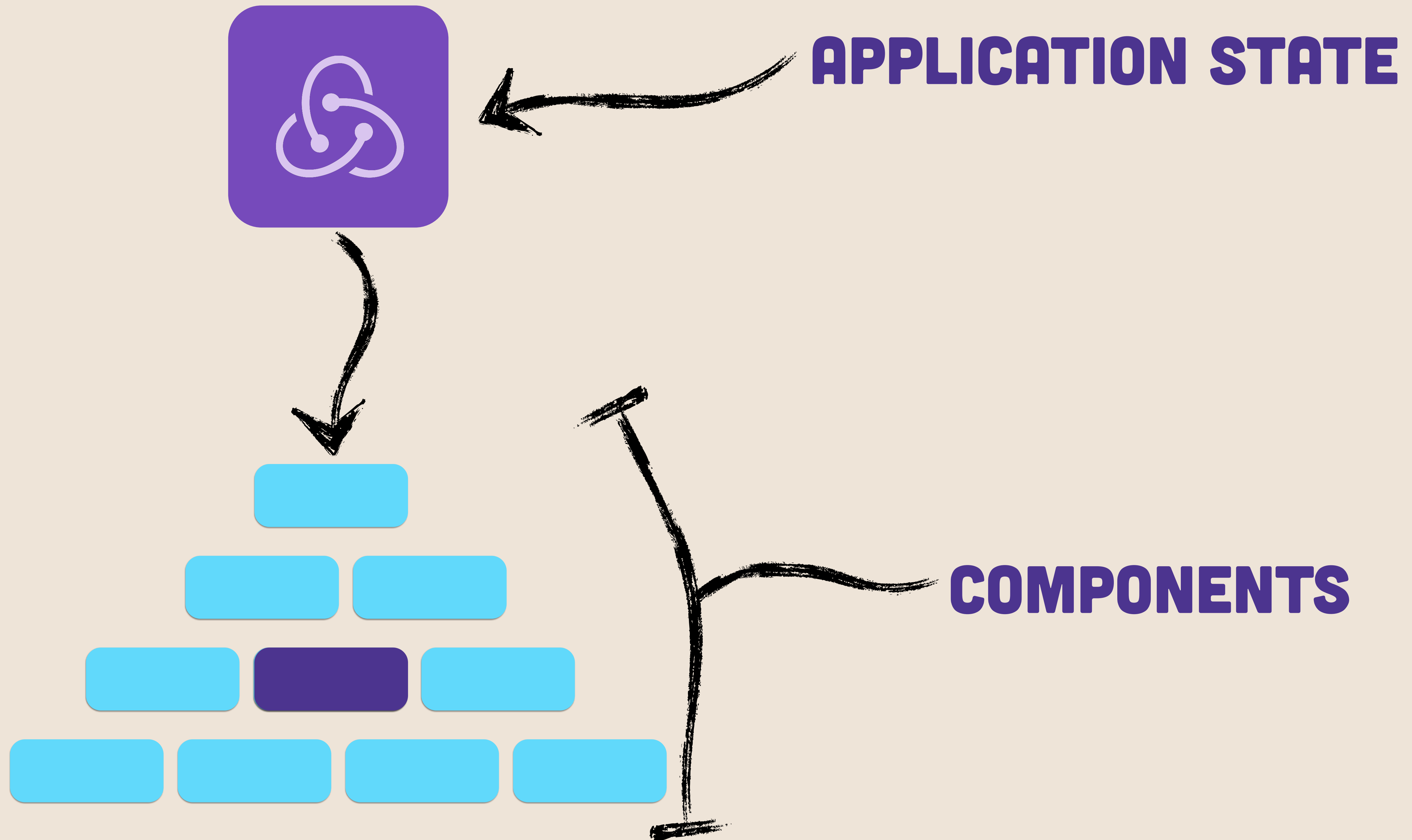
**N ITEMS**



**ON DELETE**



**“REDUX IS A PREDICTABLE STATE  
CONTAINER FOR JAVASCRIPT APPS”**





```
{
  todos: [
    [object Object],
    [object Object],
    [object Object],
  ],
  news: [
    [object Object],
    [object Object],
    [object Object],
  ]
  filter: 'all',
  modal: false,
  loading: true
}
```

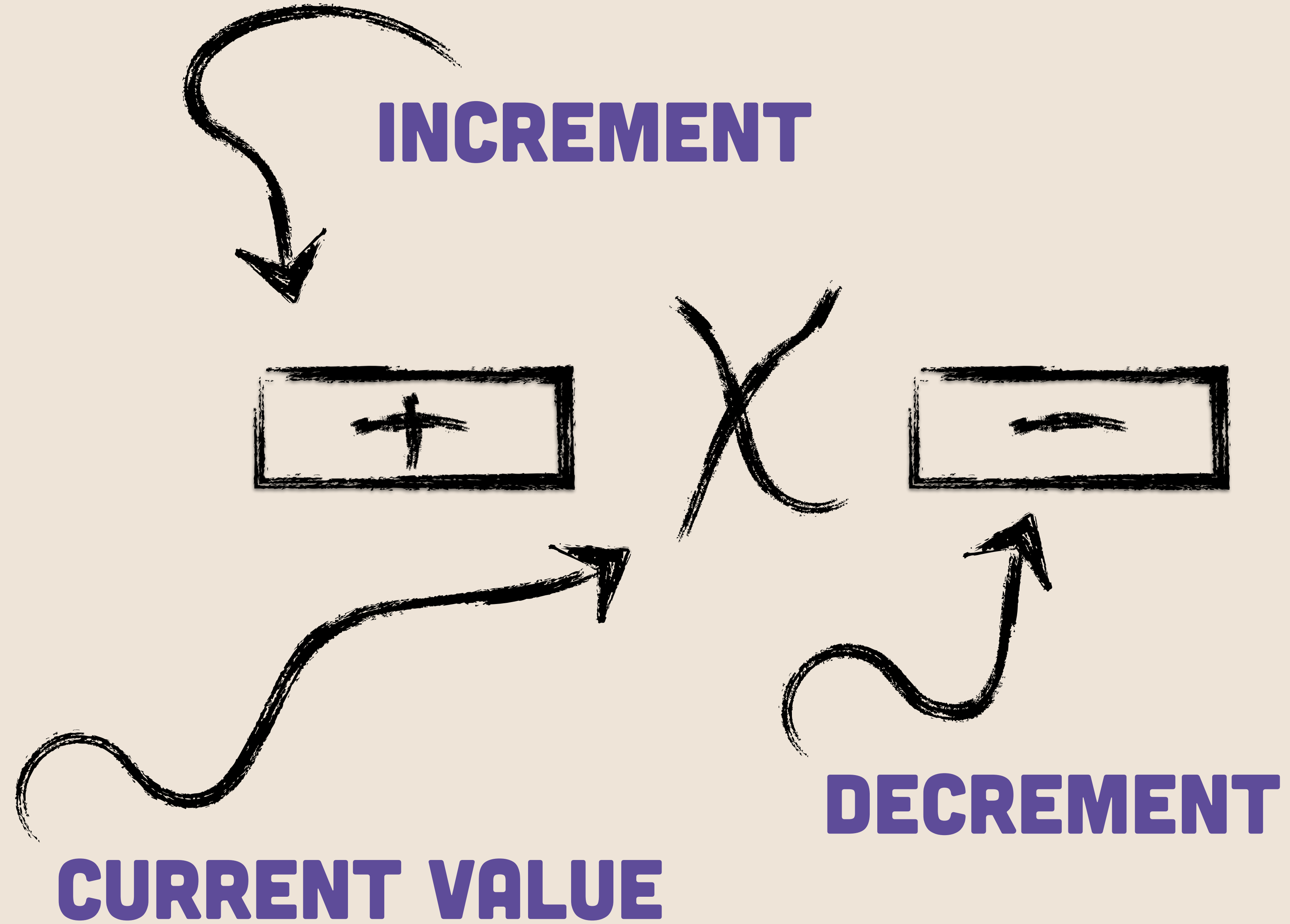


**STATE TREE**



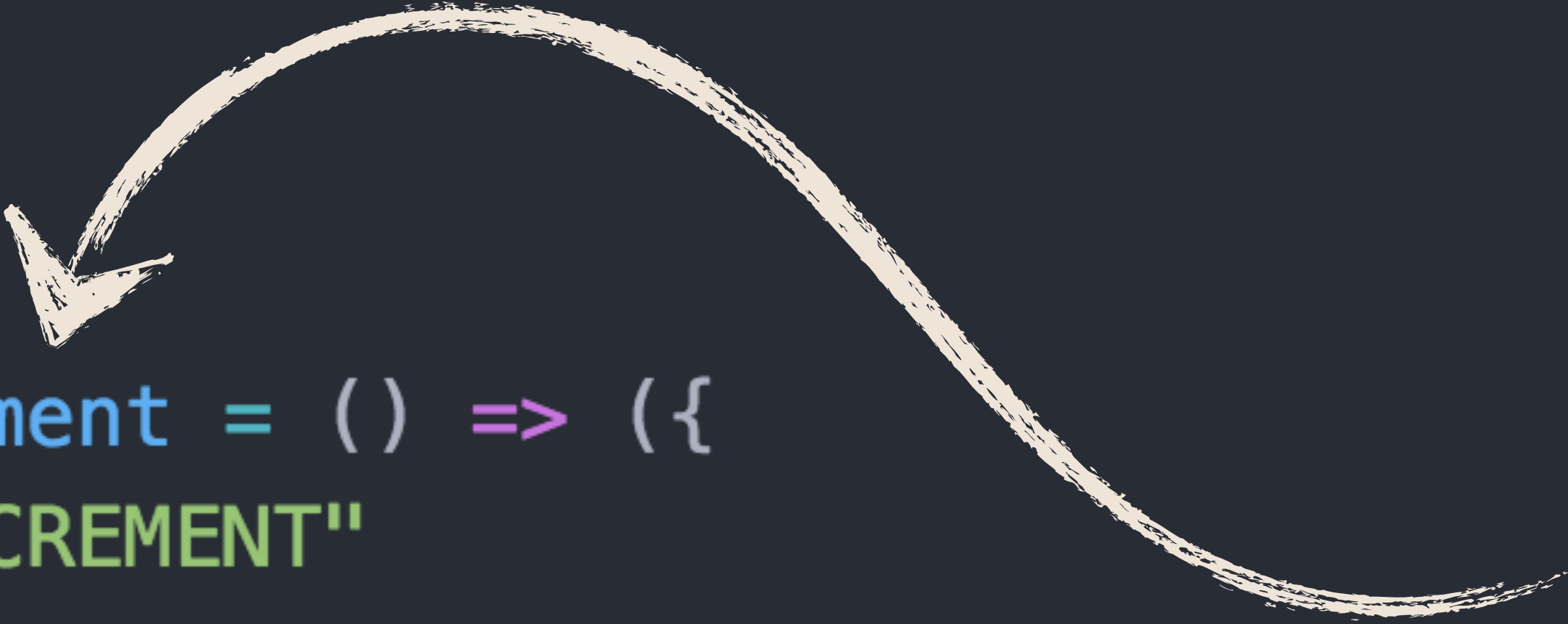
- **ACTIONS AND ACTION CREATORS**
- **REDUCER**
- **STORE**





**ACTION**

**ACTION CREATOR**



```
const increment = () => ({  
  type: "INCREMENT"  
});
```

**ACTION CREATOR**

```
const decrement = () => ({  
  type: "DECREMENT"  
});
```



**ACTION OBJECT**



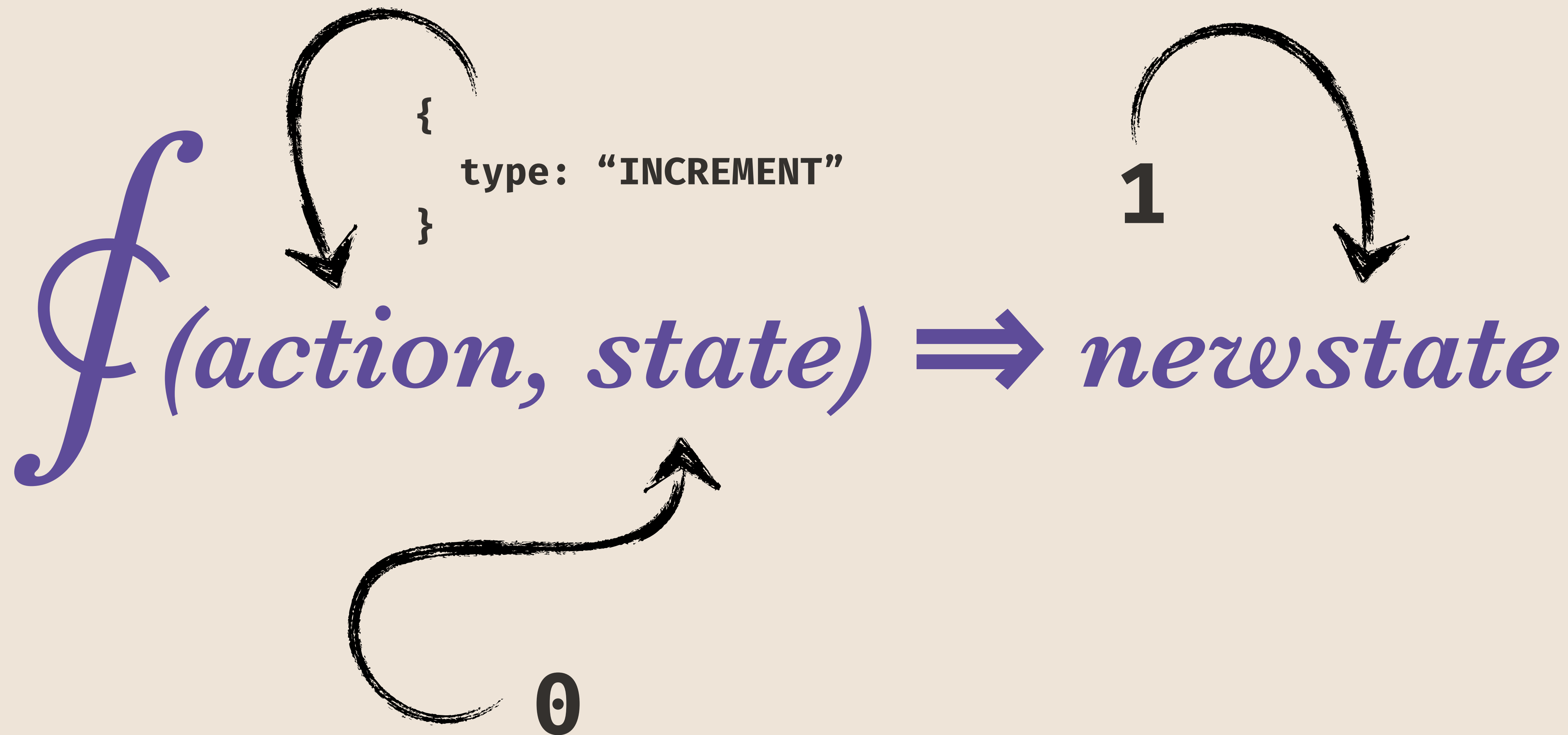
# REDUCER

```
const counterReducer = (state = 0, action) => {  
  switch (action.type) {  
    case "INCREMENT":  
      return state + 1;  
    case "DECREMENT":  
      return state - 1;  
    default:  
      return state;  
  }  
}
```



**ACTION**

**NO MUTATIONS**





**STORE**

```
import { createStore } from 'redux';  
import counterReducer from './reducers';  
import { increment, decrement } from './actions';
```

```
const store = createStore(counterReducer);
```

**CREATE A STORE**



```
store.getState();
```

**GET CURRENT STATE**



```
store.dispatch(increment()); // 1
```

```
store.dispatch(decrement()); // 0
```

**DISPATCH ACTIONS**



# *React* *&* *Redux*



```
import React from 'react';  
import { render } from 'react-dom';  
import { Provider } from 'react-redux';  
import App from './components/App';  
import store from './store';
```

**WRAPPER  
COMPONENT**



```
render(  
  <Provider store={store}>  
    <App />  
  </Provider>,  
  document.getElementById('mount')  
)
```

**PROVIDER WITH STORE**



**ROOT COMPONENT**



```
▼ <Provider store={dispatch: fn(), subscribe: subscribe(), getState: n(), ...}>
  ▼ <Router routes={$typeof: Symbol(react.element), type: Constructor(), key: null, ...} history=
    ▼ <RouterContext history={listenBefore: fn(), listen: fn(), transitionTo: fn(), ...} router=
      ▼ <App history={listenBefore: fn(), listen: fn(), transitionTo: fn(), ...} location={pathr
        ▼ <div>
          ► <Header>...</Header>
          <div className="container"/>
        </div>
      </App>
    </RouterContext>
  </Router>
</Provider>
```

```
import React, { Component } from 'react';
import { connect } from 'react-redux';
import { fetchSessions } from '../actions/sessions';
import SessionItem from '../SessionItem';
```

**CONNECT FUNCTION**

```
class SessionList extends Component {
```

```
  componentDidMount() {
```

```
    render() {
```

```
  }
```

```
const mapStateToProps = state => state.sessions;
```

**STORE STATE  
TO  
COMPONENT PROPS**

```
export default connect(mapStateToProps)(SessionList);
```



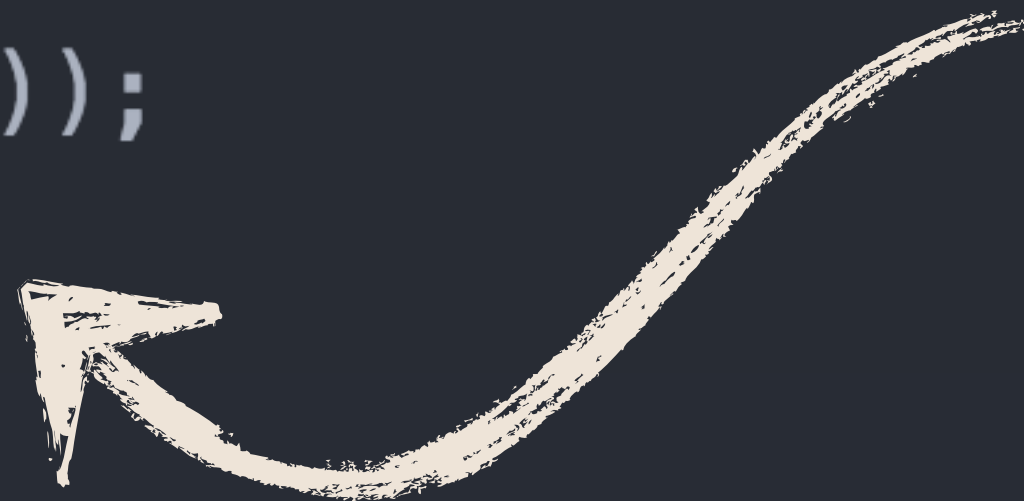
**REACT COMPONENT  
CONNECTED TO STORE**



```
onClick() {  
  const { dispatch } = this.props;  
  let session = {  
    title: 'React Front-end For Your Drupal 8 Back-end',  
    speaker: 'Bassam Ismail and Aliya Khan',  
    experience: 'Intermediate'  
  }  
}
```

**DISPATCH ACTIONS  
ON ONCLICK EVENT**

```
  dispatch(addSession(session));  
}
```





- **IMMUTABILITY**
- **COMPOSITION**
- **PURE FUNCTIONS**

**\*DISCLAIMER**



**REACT  
WITH  
DRUPAL**

```
> drush dl --select
```

```
Choose one of the available releases for drupal:
```

```
[0] : Cancel
```

```
[1] : 8.3.x-dev - 2016-Sep-23 - Development
```

```
[2] : 8.2.0-rc2 - 2016-Sep-21 - Supported
```

```
[3] : 8.1.10 - 2016-Sep-21 - Security, Recommended
```



**Use 8.2.0**

con.dd

Back to site

Manage

Shortcuts

admin

Manage fields

Edit

Manage fields

Manage form display

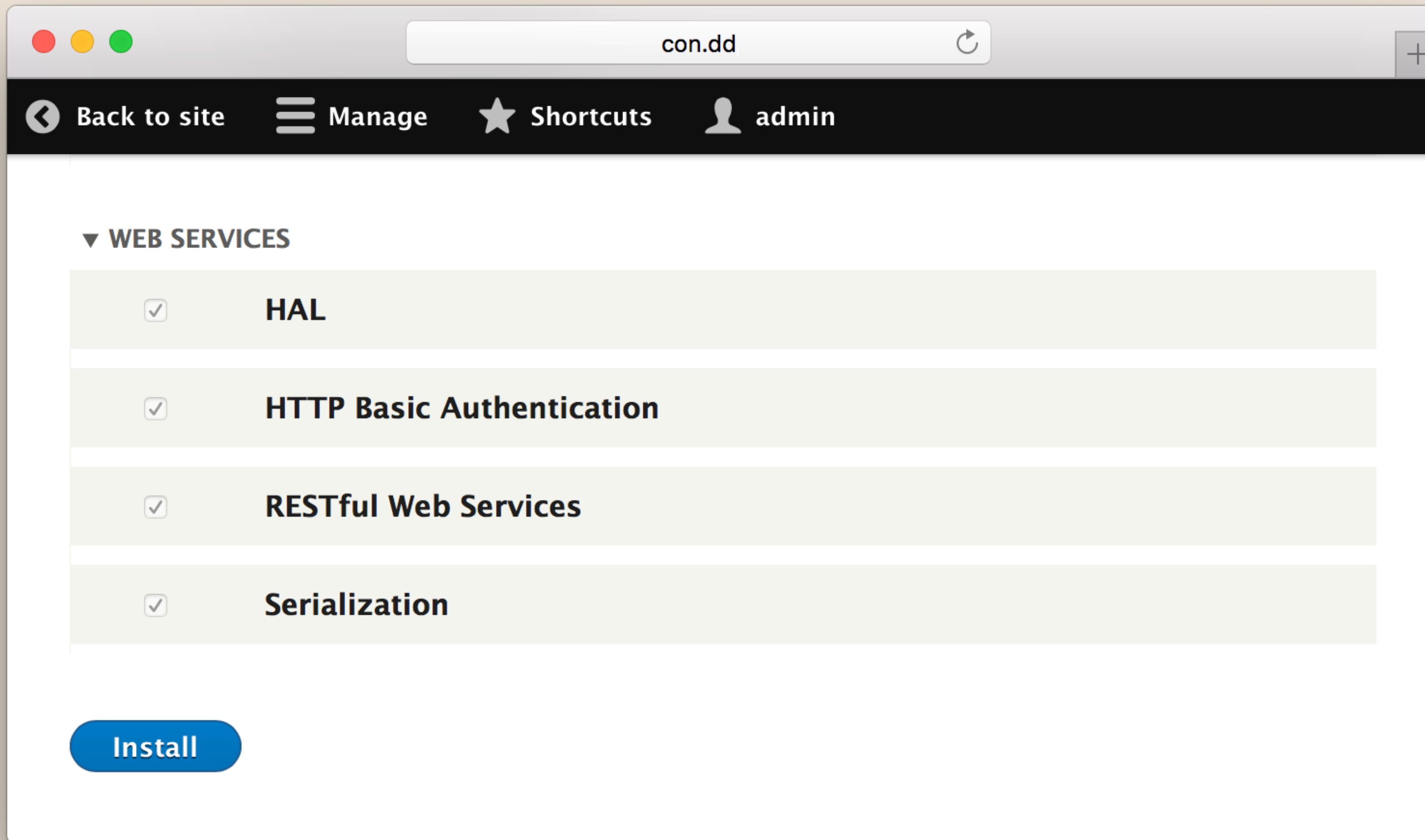
Manage display

[Home](#) » [Administration](#) » [Structure](#) » [Content types](#) » [Session](#)

+ Add field

LABEL	MACHINE NAME	FIELD TYPE	OPERATIONS
About Speaker	field_about_speaker	Text (formatted)	<div>Edit</div>
Description	field_description	Text (formatted, long)	<div>Edit</div>
Experience	field_experience	Text (plain)	<div>Edit</div>
Speaker	field_speakers	Text (formatted)	<div>Edit</div>





con.dd

VIEW BASIC INFORMATION

View name \*

Sessions

Machine name: sessions [\[Edit\]](#)

☐ Description

VIEW SETTINGS

Show:

Content

of type:

All

tagged with:

sorted by:

Newest first

REST EXPORT SETTINGS

☒ Provide a REST export

REST export path

api/sessions
















Save and edit

```
[
  - {
    + nid: [...],
    + uuid: [...],
    + vid: [...],
    + langcode: [...],
    + type: [...],
    + title: [...],
    + uid: [...],
    + status: [...],
    + created: [...],
    + changed: [...],
    + promote: [...],
    + sticky: [...],
    + revision_timestamp: [...],
    + revision_uid: [...],
    + revision_log: [ ],
    + revision_translation_affected: [...],
    + default_langcode: [...],
    + path: [ ],
    + field_about_se: [...],
    + field_description: [...],
    + field_experience: [...],
    + field_speaker: [...]
  },
  - {
    + nid: [...],
    + uuid: [...],
```

# PROGRESSIVE DECOUPLING



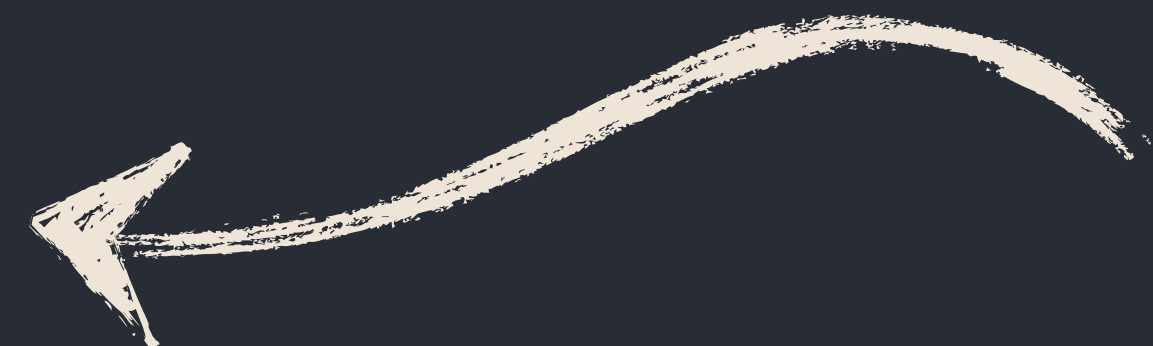
# INSIDE THEME

- ▼  themes
  - ▼  custom
    - ▼  con
      - ▼  components
        - ▶  Session
        - ▼  SessionList
          -  index.js
      - ▼  js
        -  SessionList.js
      - ▶  node\_modules
      -  .babelrc
      -  con.info.yml
      -  con.libraries.yml
      -  con.theme
      -  webpack.config.js

**REACT COMPONENTS**



**TRANSPILED FILES**



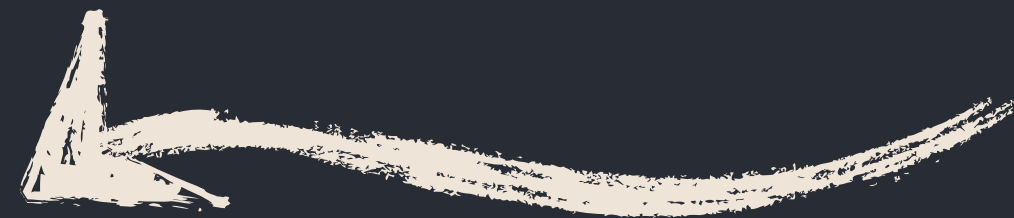
**INCLUDES TRANSPILED FILES**





## SESSIONS COMPONENTS

```
sessions:  
  version: 1.0  
  js:  
    js/SessionList.js: {}  
  dependencies:  
    - con/react-deps
```



## DEPENDENCIES (REACT, REACTDOM, ETC)

```
react-deps:  
  js:  
    js/vendor.js: { minified: true }
```

```
class SessionList extends Component {
  constructor(props) {
    super(props);
    this.state = {
      sessions: [],
      loading: true
    }
  }
}
```

```
componentWillMount() {
  fetch('http://con.dd/api/sessions')
    .then(res => res.json())
    .then(sessions => this.setState({
      loading: false,
      sessions: sessions
    }));
}
```

```
render() {
  let content = "Loading";
  if(this.state.loading === false && this.state.sessions.length > 0) {
    content = this.state.sessions.map((session, index) => {
      return (
        <Session key={index} {...session} />
      )
    })
  }
  return (
    <div>{content}</div>
  )
}
```

**GET DATA FROM DRUPAL**



**UPDATE COMPONENT STATE**



**SESSION PROPS**







## DESTRUCTURED SESSION PROPS

```
const Session = ({ title, speaker, experience }) => {  
  return (  
    <div>  
      <h1>{title}</h1>  
      <div><strong>{speaker}</strong></div>  
      <p>{experience}</p>  
    </div>  
  )  
}  
  
export default Session;
```

con.dd

Custom block library | Con

Edit custom block React: Session List | Con

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Block description \*

React: Session List

A brief description of your block.

Body

B

I

S

x<sup>2</sup>

x<sub>2</sub>

I<sub>x</sub>

↗↘

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”

🖼️

📊

☰☷

Format

📄

Source

<div id="session-list"></div>

Text format

Full HTML

About text formats ?

con.dd

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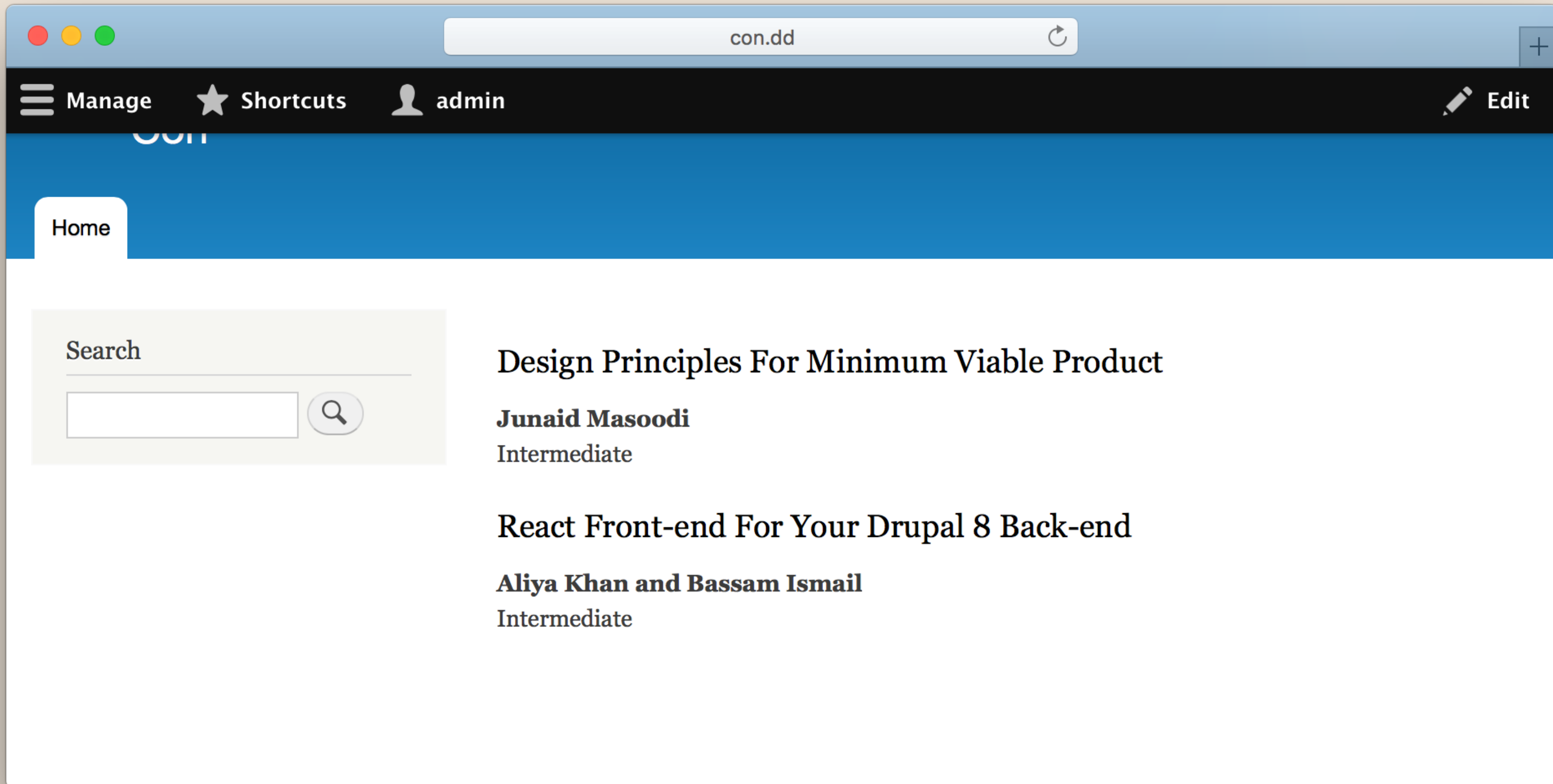
admin

No blocks in this region

Content

Place block

<div></div> Help	Help	<div>Content</div>	<div>Configure</div>
<div></div> Page title	core	<div>Content</div>	<div>Configure</div>
<div></div> Primary admin actions	core	<div>Content</div>	<div>Configure</div>
<div></div> Tabs	core	<div>Content</div>	<div>Configure</div>
<div></div> Main page content	System	<div>Content</div>	<div>Configure</div>
<div></div> Status messages	System	<div>Content</div>	<div>Configure</div>
<div></div> React: Session List	Custom	<div>Content</div>	<div>Configure</div>



Search



## Design Principles For Minimum Viable Product

**Junaaid Masoodi**

Intermediate

## React Front-end For Your Drupal 8 Back-end

**Aliya Khan and Bassam Ismail**

Intermediate



# INSIDE MODULE

- ▼ modules
  - contrib
- ▼ custom
  - ▼ session\_list
    - components
    - js
    - node\_modules
  - ▼ src
    - ▼ Controller
      - 🐘 SessionList.php
  - ▼ templates
    - 🌲 session-list.html.twig
  - 📄 .babelrc
  - 🗄 session\_list.info.yml
  - 🗄 session\_list.libraries.yml
  - ⚙ session\_list.module
  - 🗄 session\_list.routing.yml
  - 📄 webpack.config.js

**REACT COMPONENTS**

**GET INITIAL STATE**

**TEMPLATES TO MOUNT COMPONENT**

**PAGE PATH**

```
session_list.session_list_index:
```

```
  path: '/sessions'
```

```
  defaults:
```

```
    _controller: '\Drupal\session_list\Controller\SessionList::index'
```

```
    _title: 'Sessions'
```

```
  requirements:
```

```
    _permission: 'access content'
```

**ON VISITING THIS URI**



**WILL BE CALLED**



**PAGE TITLE**



```
class SessionList extends ControllerBase {
```

**CALLED ON '/SESSIONS'**

```
    public function index() {  
        $client = new Client();  
        $res = $client->request('GET', 'http://con.dd/api/sessions');  
    }
```

```
    if($res->getStatusCode() === 200) {  
        $sessions = $res->getBody();  
    }
```

**GUZZLE TO GET  
VIEW EXPORT DATA**

```
    return [  
        '#theme' => 'session_list',  
        '#sessions' => $sessions,  
        '#attached' => [  
            'library' => [  
                'session_list/sessions'
```

**PASS DATA TO TEMPLATE**

**ATTACH REACT COMPONENT**

```
            ],  
        ],  
    ];  
}
```



**MOUNTED COMPONENT**



```
<div id="session-list"></div>
```

```
<script>
```

```
  window.__INITIALSTATE__ = {{ sessions | raw }}
```

```
</script>
```

**INITIAL STATE**



```
class SessionList extends ControllerBase {
  public function index() {
    $client = new Client();
    $res = $client->request('GET', 'http://app.dd/api/sessions');
    if($res->getStatusCode() === 200) {
      $sessions = $res->getBody();
    }

    return [
      '#theme' => 'session_list',
      '#attached' => [
        'drupalSettings' => [
          'sessions' => json_decode($sessions),
        ],
        'library' => [
          'session_list/sessions'
        ],
      ],
    ];
  }
}
```

**CALLED ON '/SESSIONS'**



**GUZZLE TO GET  
VIEW EXPORT DATA**



**PASS DATA TO drupalSettings**



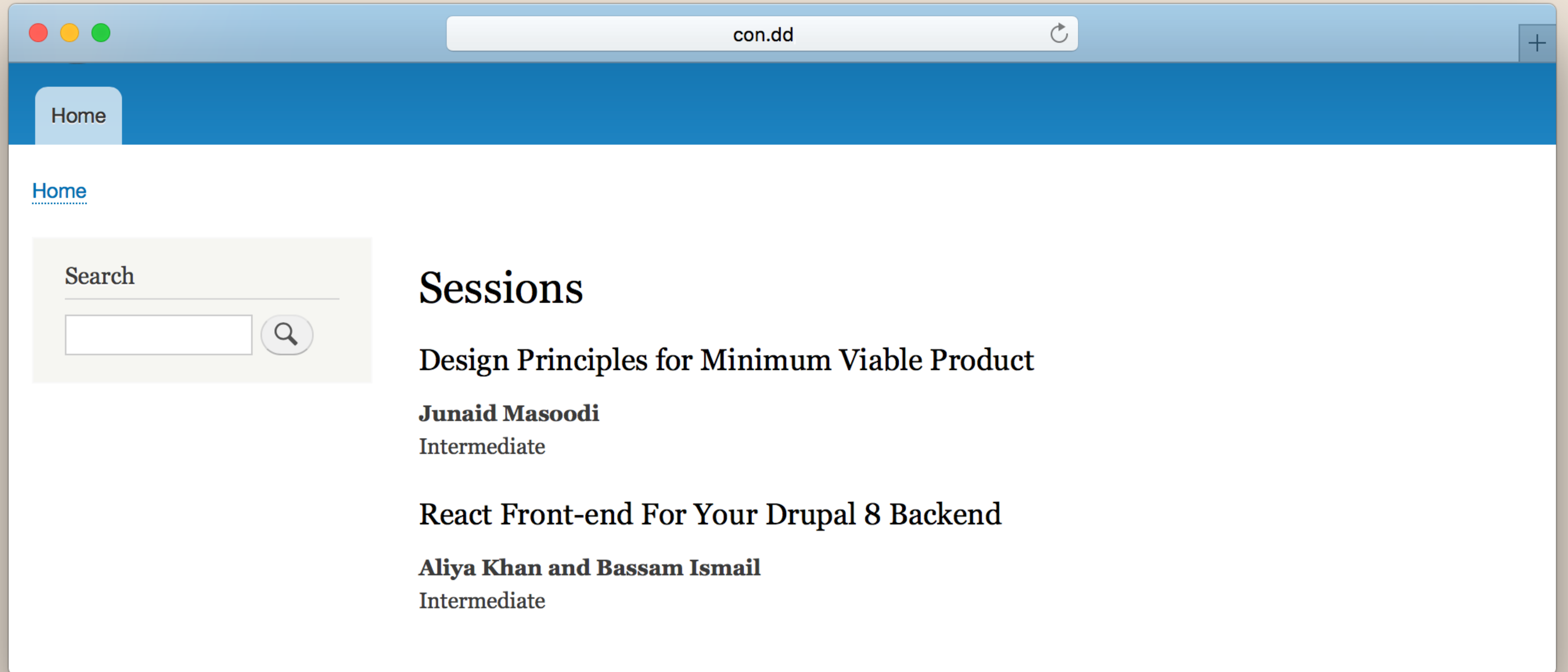
**ATTACH REACT COMPONENT**



```
componentWillMount() {  
  if (window.__INITIALSTATE__.length) {  
    this.setState({  
      loading: false,  
      sessions: window.__INITIALSTATE__  
    })  
  } else {  
    fetch('http://con.dd/api/sessions')  
      .then(res => res.json())  
      .then(sessions => this.setState({  
        loading: false,  
        sessions: sessions  
      }));  
  }  
}
```



***Check for initial State***



con.dd



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## Sessions

Design Principles for Minimum Viable Product

**Junaid Masoodi**

Intermediate

React Front-end For Your Drupal 8 Backend

**Aliya Khan and Bassam Ismail**

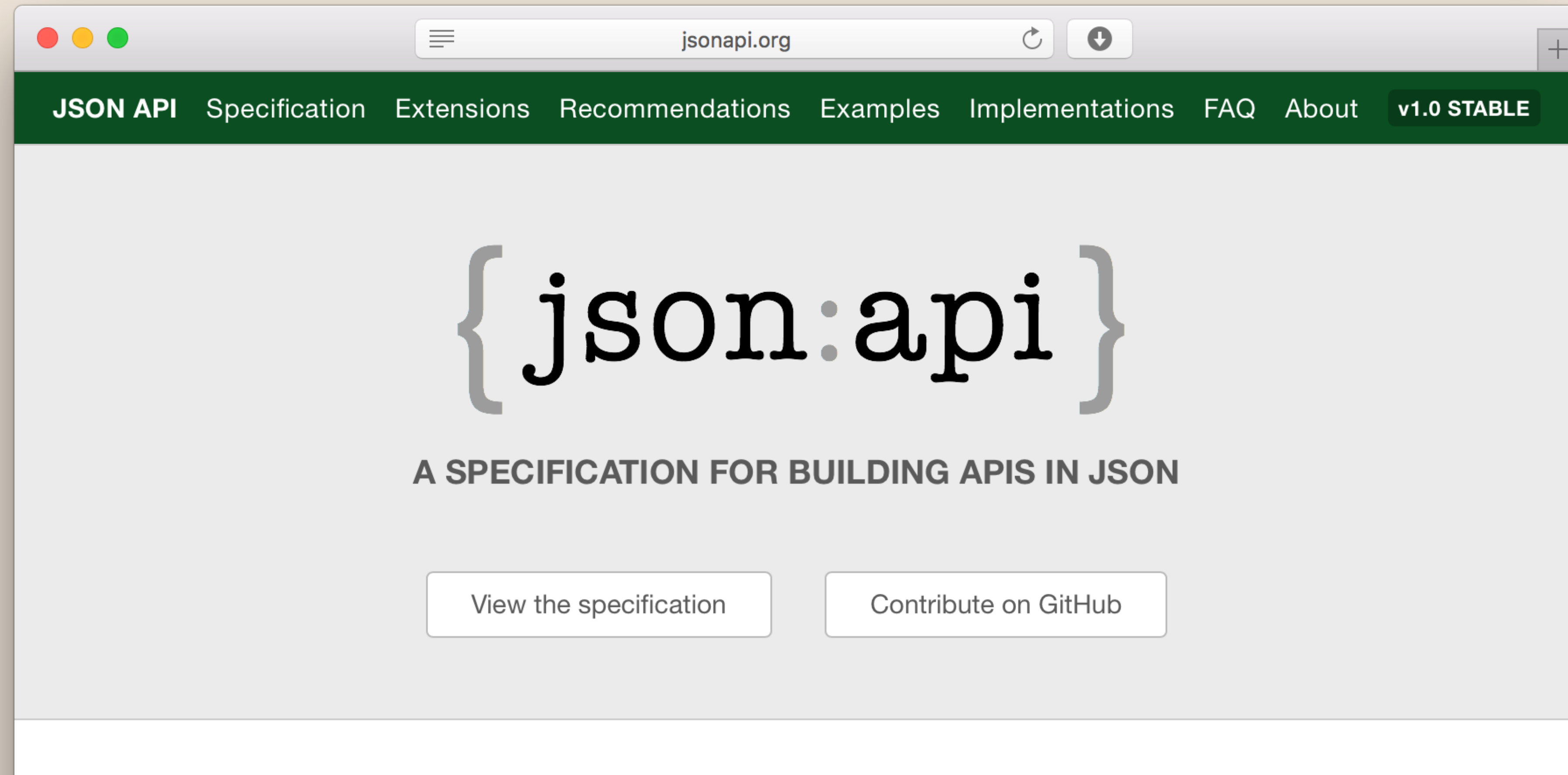
Intermediate



**FULLY  
DECOUPLED**

# JSON API

# JSON API SPECIFICATION



**CLEANER OUTPUT**



Runner Import Builder Team Library SYNC OFF

http://app.dd/api/ses: x + No Environment

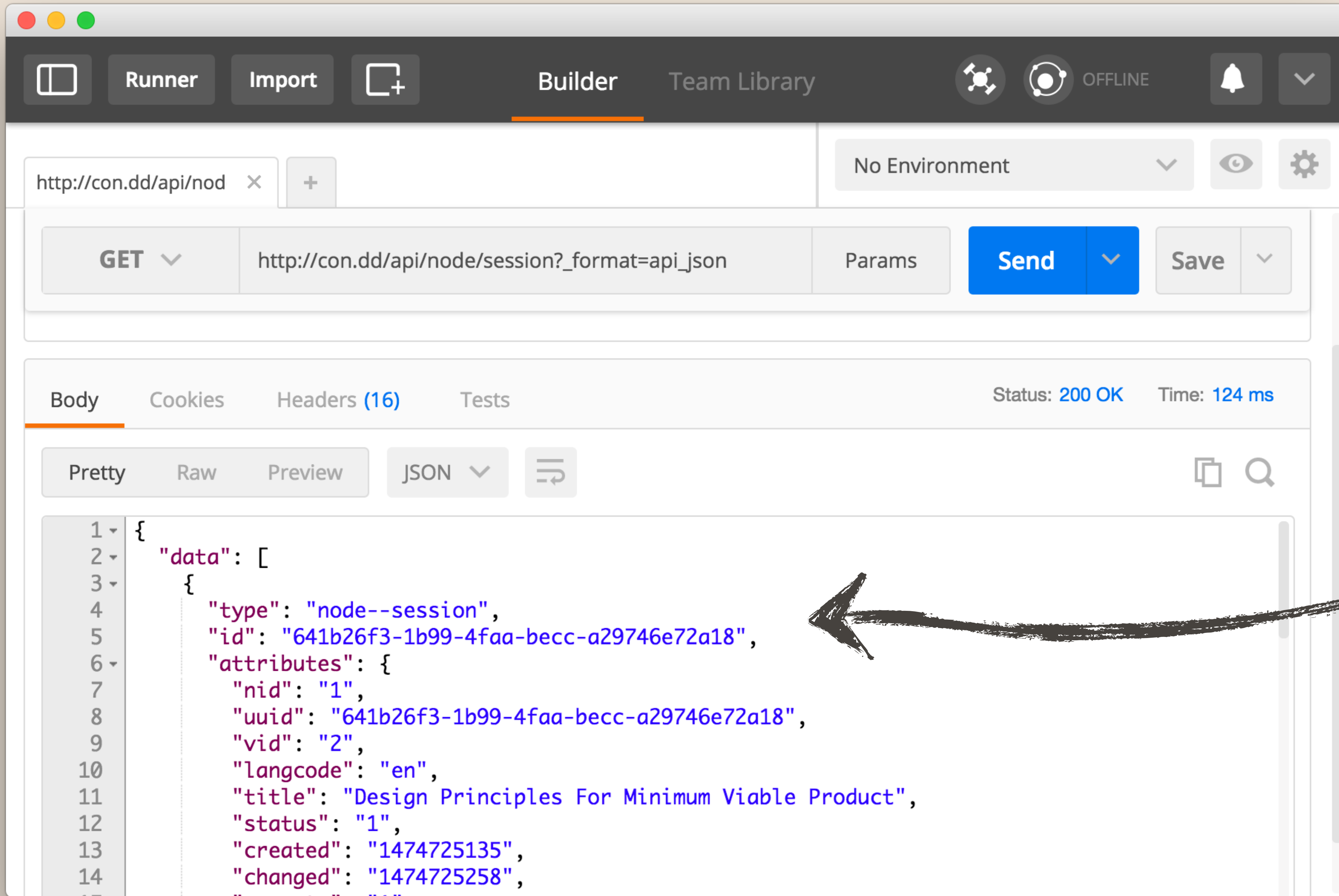
GET http://app.dd/api/sessions Params Send Save

Body Cookies Headers (20) Tests Status: 200 OK Time: 301 ms

Pretty Raw Preview JSON

```
1 [
2 {
3   "nid": [
4     {
5       "value": "9"
6     }
7   ],
8   "uuid": [
9     {
10      "value": "3aaa879d-964e-435b-a813-ad7753deeb1f"
11    }
12  ],
13  "vid": [
14    {
15      "value": "9"
16    }
17  ],
18  "langcode": [
19    {
```

**NESTED DATA**



**CLEANER OUTPUT**

# SPARSE FIELDS

# SPARSE FIELDSET

RunnerImportBuilderTeam Library

http://app.dd/api/nod

No Environment

GET

http://app.dd/api/node/session?\_format=api\_json&fields[node--session]

Params

Send

Save

_format	api_json		
fields[node--session]	title,field_experience,field_speakers		
key	value		

AuthorizationHeadersBodyPre-request ScriptTests

TypeNo Auth

BodyCookiesHeaders (20)Tests

Status: 200 OKTime: 181 ms

PrettyRawPreviewJSON

```
1 {
2   "data": [
3     {
4       "type": "node--session",
5       "id": "0d297846-6a9c-4245-80d8-bd0bb8a5915d",
6       "attributes": {
7         "title": "React Front-end For Your Drupal 8 Back-end",
8         "field_experience": "Beginner",
9         "field_speakers": {
10          "value": "Bassam Ismail and Aliya Khanam",
11          "format": null
12        }
13      },
14      "links": {
15        "self": "http://app.dd/api/node/session/0d297846-6a9c-4245-80d8-bd0bb8a5915d?_format=api_json"
16      }
17    },
18  ]
19 }
```

# LIMITED FIELDS



```
> drush dl jsonapi -y
```

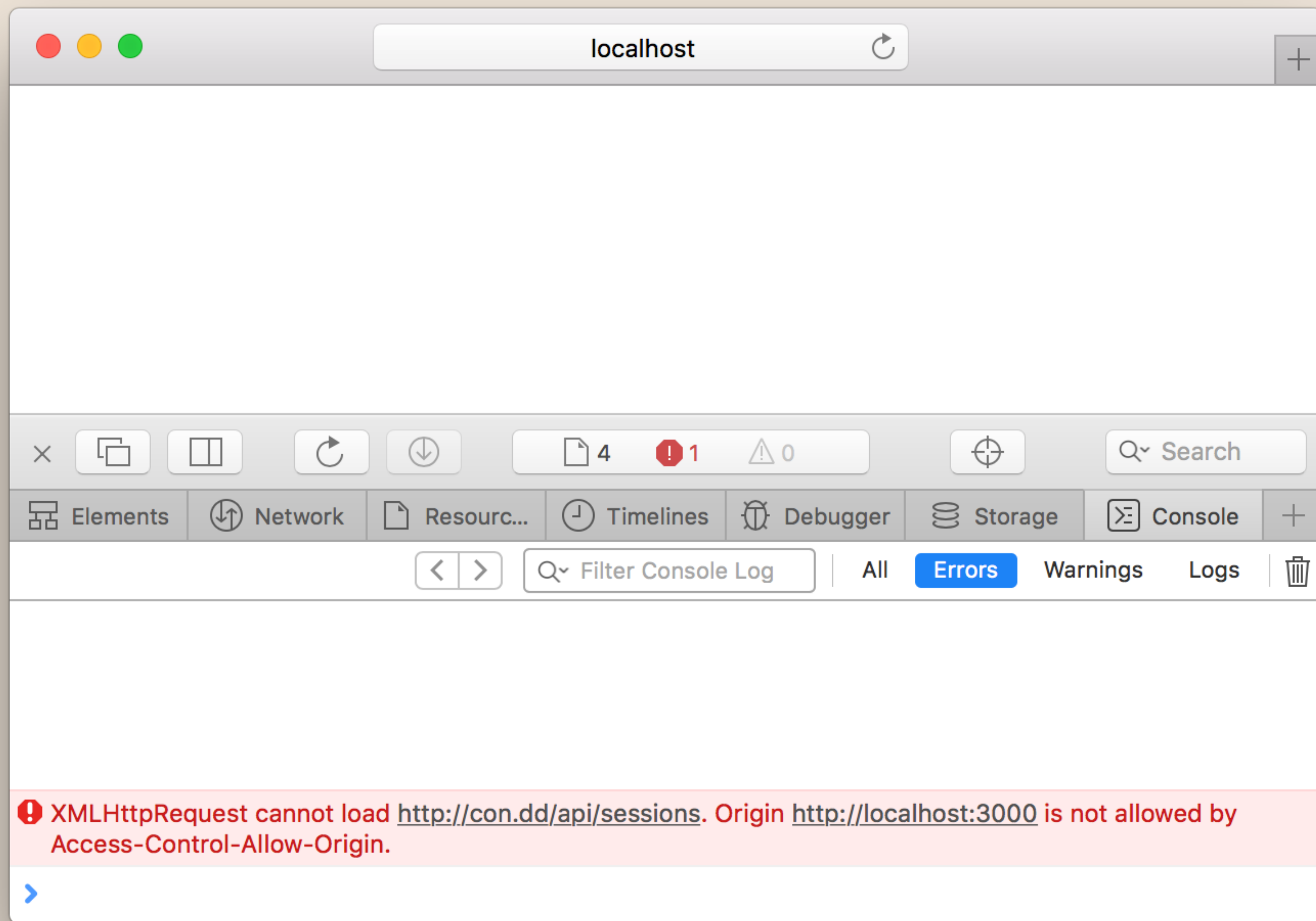
**NAMESPACE**

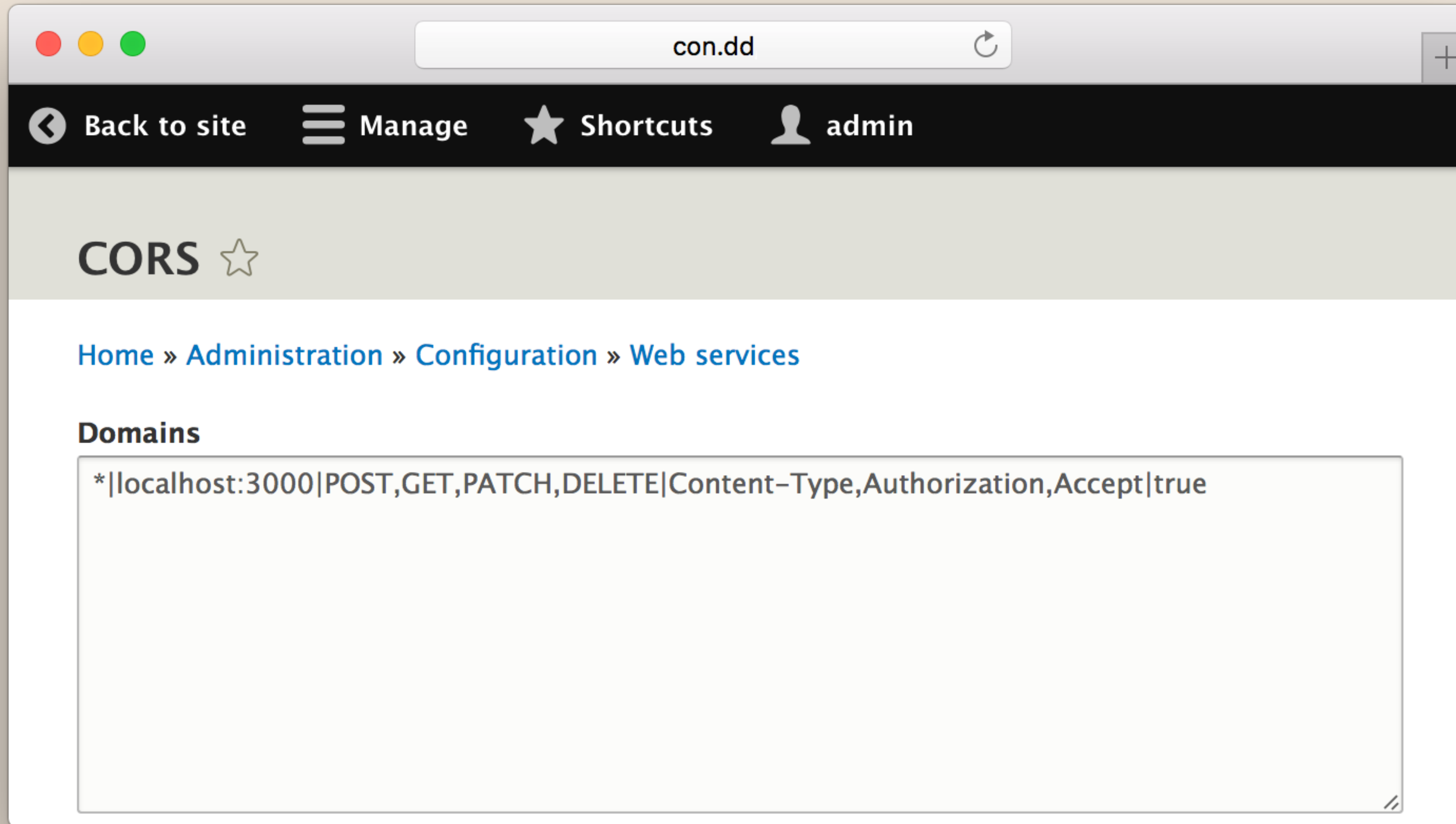
**BUNDLE**

**http://con.dd/api/node/session?\_format=api\_json**

**ENTITY TYPE**

**FORMAT PARAMS**



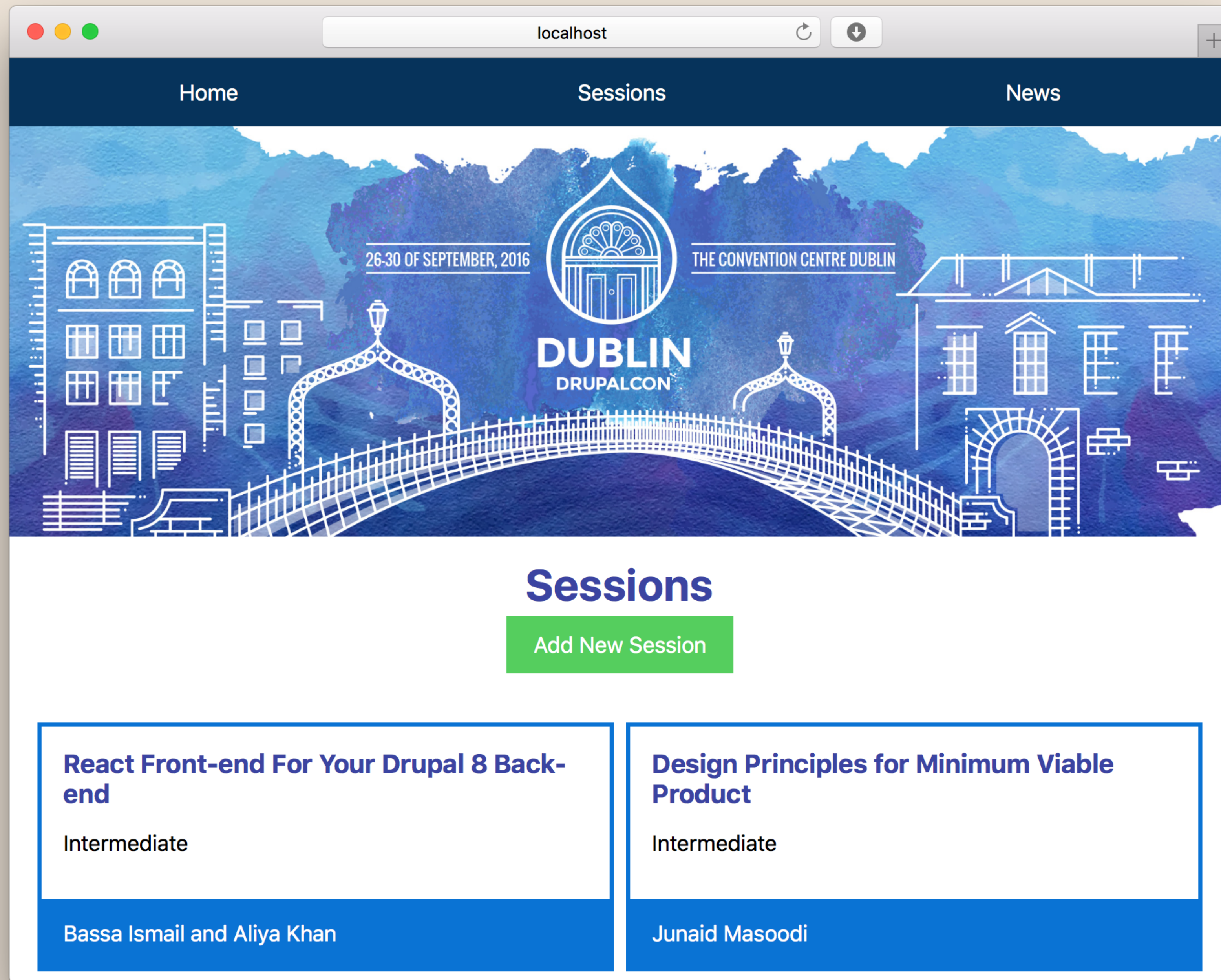




# APACHE

```
Header always set Access-Control-Allow-Origin "*"
Header always set Access-Control-Allow-Methods "POST, GET, OPTIONS, DELETE, PUT, PATCH"
Header always set Access-Control-Max-Age "1000"
Header always set Access-Control-Allow-Headers "Content-Type, origin, authorization, accept, x-csrf-token"
RewriteEngine On
RewriteCond %{REQUEST_METHOD} OPTIONS
RewriteRule ^(.*)$ $1 [R=200,L]
```





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Sessions

News

26-30 OF SEPTEMBER, 2016

THE CONVENTION CENTRE DUBLIN

**DUBLIN**  
DRUPALCON

## Sessions

Add New Session

### React Front-end For Your Drupal 8 Back-end

Intermediate

Bassa Ismail and Aliya Khan


### Design Principles for Minimum Viable Product

Intermediate

Junaid Masoodi



## GETTING ENTITY COLLECTION



```
export const fetchSessions = () => {  
  return dispatch => {  
    dispatch(getSessions());  
    return fetch('http://app.dd/api/node/session?_format=api_json')  
      .then(res => res.json())  
      .then(sessions => {  
        dispatch(receiveSessions(sessions))  
      })  
  }  
}
```

```
export const fetchSession = (id) => {  
  return dispatch => {  
    dispatch(getSession())  
    return fetch(`http://app.dd/api/node/session/${id}?_format=api_json`)  
      .then(res => res.json())  
      .then(session => dispatch(receiveSession(session.data)));  
  }  
}
```



**GETTING SPECIFIC ID**



RunnerImportBuilderTeam Library

OFFLINE

http://con.dd/api/nod

No Environment

GET

http://con.dd/api/node/session?\_format=api\_json

Params

Send

Save

BodyCookiesHeaders (16)Tests

Status: 200 OKTime: 124 ms

PrettyRawPreviewJSON

```
1 {
2   "data": [
3     {
4       "type": "node--session",
5       "id": "641b26f3-1b99-4faa-becc-a29746e72a18",
6       "attributes": {
7         "nid": "1",
8         "uuid": "641b26f3-1b99-4faa-becc-a29746e72a18",
9         "vid": "2",
10        "langcode": "en",
11        "title": "Design Principles For Minimum Viable Product",
12        "status": "1",
13        "created": "1474725135",
14        "changed": "1474725258",
```

ID

```
export const deleteSession = (id) => {  
  return dispatch => {  
    return fetch(`http://app.dd/api/node/session/${id}?_format=api_json`, {  
      method: 'delete',  
      headers: {  
        Authorization: 'Basic YWRtaW46YWRtaW4=',  
        "Content-Type": "application/vnd.api+json"  
      }  
    })  
    .then(() => {  
      browserHistory.push('/sessions')  
    })  
  }  
}
```



**AUTHENTICATION FOR  
CREATE, UPDATE & DELETE**

```
export const deleteSession = (id) => {  
  return dispatch => {  
    return fetch(`http://app.dd/api/node/session/${id}?_format=api_json`, {  
      method: 'delete',  
      headers: {  
        Authorization: 'Bearer OAuthTokenWillGoHere',  
        "Content-Type": "application/vnd.api+json"  
      }  
    })  
    .then(() => {  
      browserHistory.push('/sessions')  
    })  
  }  
}
```



**OAUTH FOR AUTHENTICATION**

```
export const addSession = (session) => {  
  var post = {  
    data: {  
      type: 'session',  
      attributes: session  
    }  
  }  
  return dispatch => {  
    dispatch(addingSession())  
    return fetch(`http://app.dd/api/node/session?_format=api_json`, {  
      method: 'post',  
      headers: {  
        Authorization: 'Basic YWRtaW46YWRtaW4=',  
        "Content-Type": 'application/vnd.api+json'  
      },  
      body: JSON.stringify(post)  
    })  
    .then(res => {  
      browserHistory.push('/sessions')  
    })  
  }  
}
```

**POST DATA**



**TO COLLECTION URL**





```
export const patchSession = (session, id, nid) => {
  var post = {
    data: {
      id: parseInt(nid, 10),
      attributes: session
    }
  };
  return dispatch => {
    dispatch(updatingSession());
    return fetch(`http://app.dd/api/node/session/${id}?_format=api_json`, {
      method: 'PATCH',
      headers: {
        Authorization: 'Basic YWRtaW46YWRtaW4=',
        "Content-Type": 'application/vnd.api+json'
      },
      body: JSON.stringify(post)
    })
    .then(session => {
      dispatch(updatedSession(session))
      browserHistory.push(`/sessions`)
      dispatch(toggleEditing(session))
    })
    .catch(err => console.log(err));
  }
}
```

**DATA TO UPDATE**  
**ID = NID**



**SESSION URL**  
**TO UPDATE**



```
import React from 'react';
import { Route } from 'react-router';
import App from './components/App';
import SessionList from './components/SessionList';
import SessionPage from './components/SessionPage';
import NewSession from './components/NewSession';
import NewsList from './components/NewsList';
```

**COMPONENTS BASED  
ON ROUTES**



```
const routes = (
  <Route path="/" component={App}>
    <Route path="sessions" component={SessionList} />
    <Route path="sessions/new" component={NewSession} />
    <Route path="sessions/:id" component={SessionPage} />
    <Route path="news" component={NewsList} />
  </Route>
)
```

**ON “/SESSIONS/NEW”**

**LOAD NEWSESSION  
COMPONENT**



```
export default routes;
```

```
const routes = (  
  <Route path="/" component={App}>  
    <Route path="sessions" component={SessionList} />  
    <Route path="sessions/:id" component={SessionPage} />  
    <Route path="news" component={NewsList} />  
    <Route path="admin" component={AuthContainer}>  
      <Route path="sessions/new" component={NewSession} />  
    </Route>  
  </Route>  
)
```



**WRAPPER COMPONENT  
FOR AUTHENTICATED ROUTES**



*// Sync*

```
const getSession = () => ({  
  type: 'GET_SESSIONS',  
  loading: true,  
  done: false  
});
```

```
const receiveSessions = (sessions) => ({  
  type: 'RECEIVE_SESSIONS',  
  loading: false,  
  done: true,  
  sessions: sessions  
});
```

```
export const addingSession = () => ({  
  type: 'ADD_SESSION',  
  done: false  
});
```

```
export const updatingSession = () => ({  
  type: 'UPDATE_SESSION',  
  done: false  
});
```



```
const sessionsReducer = (state={
  loading: false,
  done: false,
  sessions: [],
  edit: false
}, action) => {
  switch (action.type) {
    case 'GET_SESSIONS':
      return {...state, loading: action.loading};
    case 'RECEIVE_SESSIONS':
      return {...state, loading: action.loading, sessions: action.sessions, done: action.done}
    case 'GET_SESSION':
      return {...state, loading: action.loading};
    case 'RECEIVE_SESSION':
      return {...state, loading: action.loading, session: action.session, done: action.done}
    case 'EDIT_SESSION':
      return {...state, edit: !state.edit}
    default:
      return state;
  }
}
```

**DEMO**

**THANK YOU**





**RATE OUR SESSION**

