CSE2019: Open Source Software Development

Lab 3: Markdown & ES6-based frameworks

Software Engineering Lab

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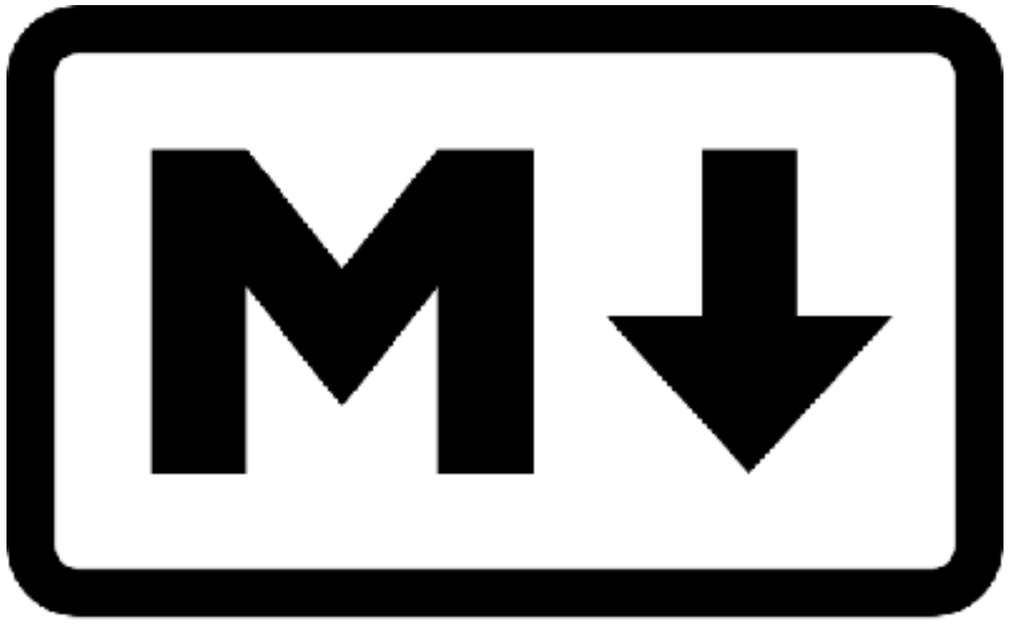
오늘의 할일 #1 - 다음주 발표자 선정

- Backends(Node.js / Django / Flask / ruby on rails / laravel)
- 각각 팀당 한 주제 씩 선정
- 한팀 당 10분 발표
- 발표자는 다음주 화요일(3월 28일 23:59분)전까지 조교에게 발표자료 보내기

Markdown



- 마크다운(markdown)은 일반 텍스트 문서의 양식을 편집하는 문법이다
- README 파일이나 온라인 문서, 혹은 일반 텍스트 편집기로 문서 양식을 편집할 때 쓰인다.
- 마크다운을 이용해 작성된 문서는 쉽게 HTML 등 다른 문서형태로 변환이 가능하다.

Markdown

장점

- 읽기 쉽다.
- 익히기 쉽다.
- 모바일 친화적이다.

단점

- 문법이 단순하다.
- 확장 문법이 많다.
- 멀티미디어 삽입이 불편하다.

Markdown - Example

Linux CPU	Linux GPU	Mac OS CPU	Windows CPU	Android
build passing	build running	build running	build running	build passing

TensorFlow is an open source software library for numerical computation using data flow graphs. Nodes in the graph represent mathematical operations, while the graph edges represent the multidimensional data arrays (tensors) that flow between them. This flexible architecture lets you deploy computation to one or more CPUs or GPUs in a desktop, server, or mobile device without rewriting code. TensorFlow also includes TensorBoard, a data visualization toolkit.

TensorFlow was originally developed by researchers and engineers working on the Google Brain team within Google's Machine Intelligence research organization for the purposes of conducting machine learning and deep neural networks research. The system is general enough to be applicable in a wide variety of other domains, as well.

If you'd like to contribute to TensorFlow, be sure to review the contribution guidelines.

Markdown - Example

Phaser - HTML5 Game Framework

Phaser is a fast, free, and fun open source HTML5 game framework. It uses a custom build of Pixi.js for WebGL and Canvas rendering, and supports desktop and mobile web browsers. Games can be compiled to iOS, Android and native desktop apps via 3rd party tools. You can use JavaScript or TypeScript for development.

Along with the fantastic open source community, Phaser is actively developed and maintained by Photon Storm. As a result of rapid support, and a developer friendly API, Phaser is currently one of the most starred game frameworks on GitHub.

Thousands of developers worldwide use Phaser. From indies and multi-national digital agencies, to schools and Universities. Each creating their own incredible games.

Visit: The Phaser website and follow on Twitter (#phaserjs)
Learn: API Docs, Support Forum and StackOverflow
Code: 700+ Examples (source available in this repo)
Read: Weekly Phaser World Newsletter
Chat: Slack and Discord
Extend: With Phaser Plugins
Be awesome: Support the future of Phaser

Grab the source and join in the fun!

Contents

Markdown - Syntax

```
# Welcome to the 2017CSE2019 wiki!
## 2017CSE2019
### 2017CSE2019

### [slack](https://hu-2017-spring.slack.com)
![slack!](https://a.slack-edge.com/0180/img/icons/app-256.png)

### **2017CSE2019**
### _2017CSE2019_
### `2017CSE2019`

* 2017CSE2019
* 2017CSE2019
* 2017CSE2019
1. 2017CSE2019
2. 2017CSE2019
3. 2017CSE2019

> 2017CSE2019
***
2017CSE2019
```

Welcome to the 2017CSE2019 wiki!

2017CSE2019

2017CSE2019

slack

2017CSE2019

2017CSE2019

2017CSE2019

- 2017CSE2019
- 2017CSE2019
- 2017CSE2019

1. 2017CSE2019
2. 2017CSE2019
3. 2017CSE2019

> 2017CSE2019

2017CSE2019

Markdown - Syntax

- 문단제목

```
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```
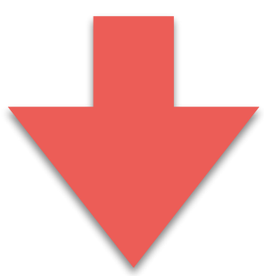



Welcome to the 2017CSE2019 wiki!

2017CSE2019

2017CSE2019

Markdown - Syntax

- 링크 , 이미지

```
### [slack](https://hu-2017-spring.slack.com)
![slack!](https://a.slack-edge.com/0180/img/icons/app-256.png)
```

slack

Markdown - Syntax

- 볼드체 ,이탤릭체, 인용문구

```
### **2017CSE2019**
### _2017CSE2019_
### `2017CSE2019`
```

2017CSE2019

2017CSE2019

`2017CSE2019`

Markdown - Syntax

- 순서없는 리스트 ,순서있는 리스트

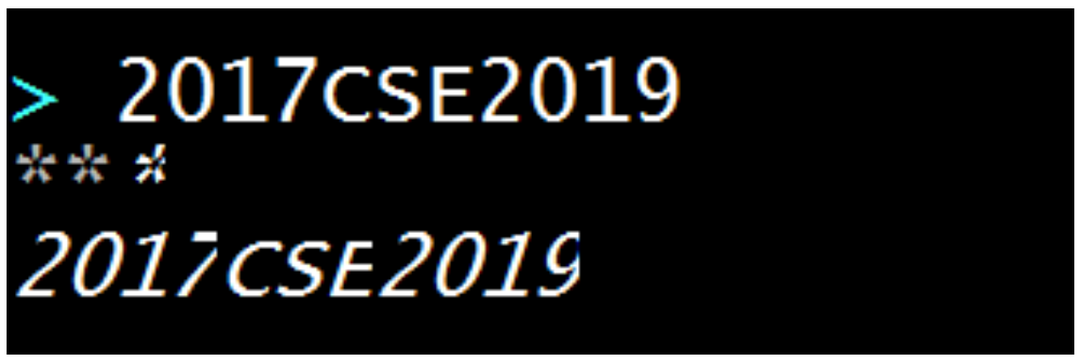
```
* 2017CSE2019
* 2017CSE2019
* 2017CSE2019
1. 2017CSE2019
2. 2017CSE2019
3. 2017CSE2019
```

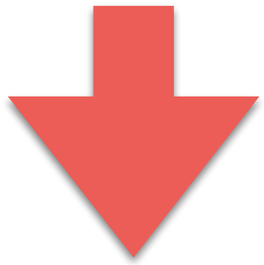
- 2017CSE2019
- 2017CSE2019
- 2017CSE2019

1. 2017CSE2019
2. 2017CSE2019
3. 2017CSE2019

Markdown - Syntax

- 들여쓰기 , 가로줄





> 2017CSE2019

2017CSE2019

ES6-based frameworks

React

NPM

- Node Package Modules
- Node.js에서 사용가능한 모듈들을 패키지화 시켜놓은 것

설치

- https://nodejs.org/en/download/
- https://nodejs.org/ko/download/package-manager/
- npm install -g bower
- node -v, npm -v를 통해 설치 확인

Polymer

Polymer 설치

- npm install -g polymer-CLI
- bower install —allow-root

Polymer CLI로 기본셋팅하기

- polymer init starter-kit
- 자동으로 어플리케이션 구축에 필요한 파일을 추가해줌

Polymer 서버 실행

- polymer serve
- localhost://8080 으로 확인

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Polymer

Polymer Example

- src/ 폴더 아래 파일들 수정해보기
- localhost://8080 으로 확인

Polymer 참고 블로그

- https://www.polymer-project.org/2.0/start/
- https://auth0.com/blog/build-your-first-app-with-polymer-and-web-components/
- https://scotch.io/tutorials/build-a-real-time-polymer-to-do-app

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Angularjs

Angularjs 설치

- npm install angular

Express.js 설치

- npm install -g express-generator

Angularjs

Express 서버 실행

- express 입력
- npm install
- npm start
- http://localhost:3000

Angularjs Example

- views/index.jade 수정해보기
- https://www.w3schools.com/angular/

React

React 설치

- npm install -g create-react-app

React CLI로 기본셋팅하기

- create-react-app hello-world
- 자동으로 어플리케이션 구축에 필요한 파일을 추가해줌

React 서버 실행

- cd hello-world
- npm start
- localhost://3000 으로 확인

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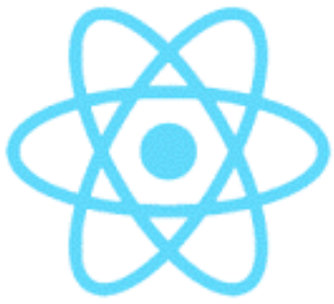
React

React Example



React

- https://facebook.github.io/react/docs/hello-world.html
- Hello world 폴더의 src/index.js 수정해보기

React tutorial

- https://facebook.github.io/react/

Cross-platform web applications

크로스 플랫폼

- 웹브라우저, OS, 컴퓨터 언어, 컴퓨터 소프트웨어등 여러종류의 플랫폼에서 동작 할 수 있다는 것을 의미
- 하나의 개발환경으로 디자인, 개발, 테스트를 모두 해볼수 있다
- Sencha < https://www.sencha.com/ > 

- Titanium < http://www.appcelerator.com/ > 

오늘의 할일 #2

- Polymer, Angular, React 중 하나를 골라 설치
- 예제로 주워진 코드를 실행
- 예제의 결과물을 스크린샷 찍어 조교의 DM으로 보내기

Assignment #2

- 노트앱 UI 만들기
  - 프론트엔드 라이브러리를 하나 골라 UI를 만들어봅시다.
  - “Boilerplate” 로부터 하나씩 해 봅시다.
    - “Boilerplate”: 바로 사용해 볼 수 있을 정도로 준비된 템플릿 예제
  - 스토리보드를 어떻게 적용할 지 고민해 봅시다.
    - Router를 사용해서 SPA로 만들지, 페이지 이동을 구현할지 정합시다
    - 내 스토리보드를 구현하기 위해 필요한 라이브러리들을 조합해봅시다
  - 제출할 것: 만든 UI 가 있는 github 주소 (다음주 수요일 0시까지)