

DEPARTMENT OF
COMPUTER SCIENCE
計算機科學系

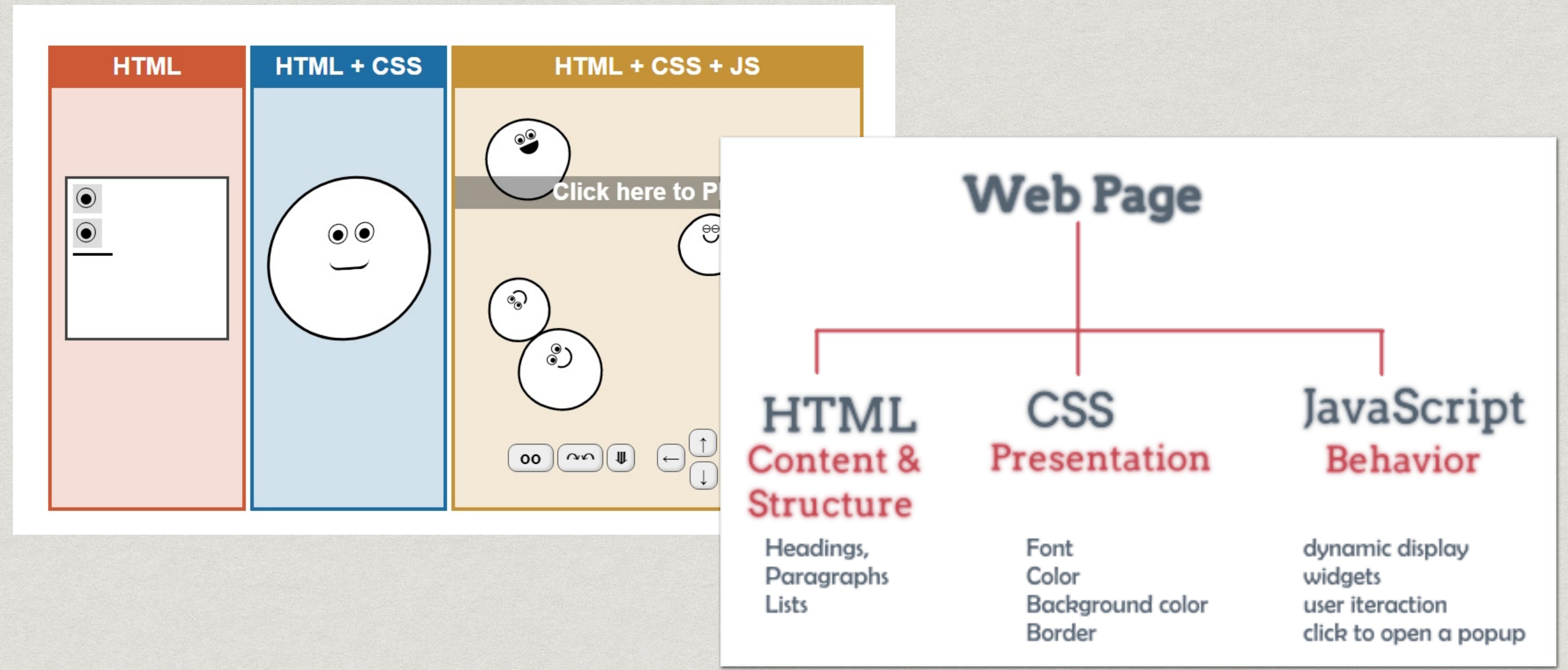
COURSE OVERVIEW

COMP7980 - WEB AND MOBILE PROGRAMMING

CHAPTER 0 - 2022 - HKBU

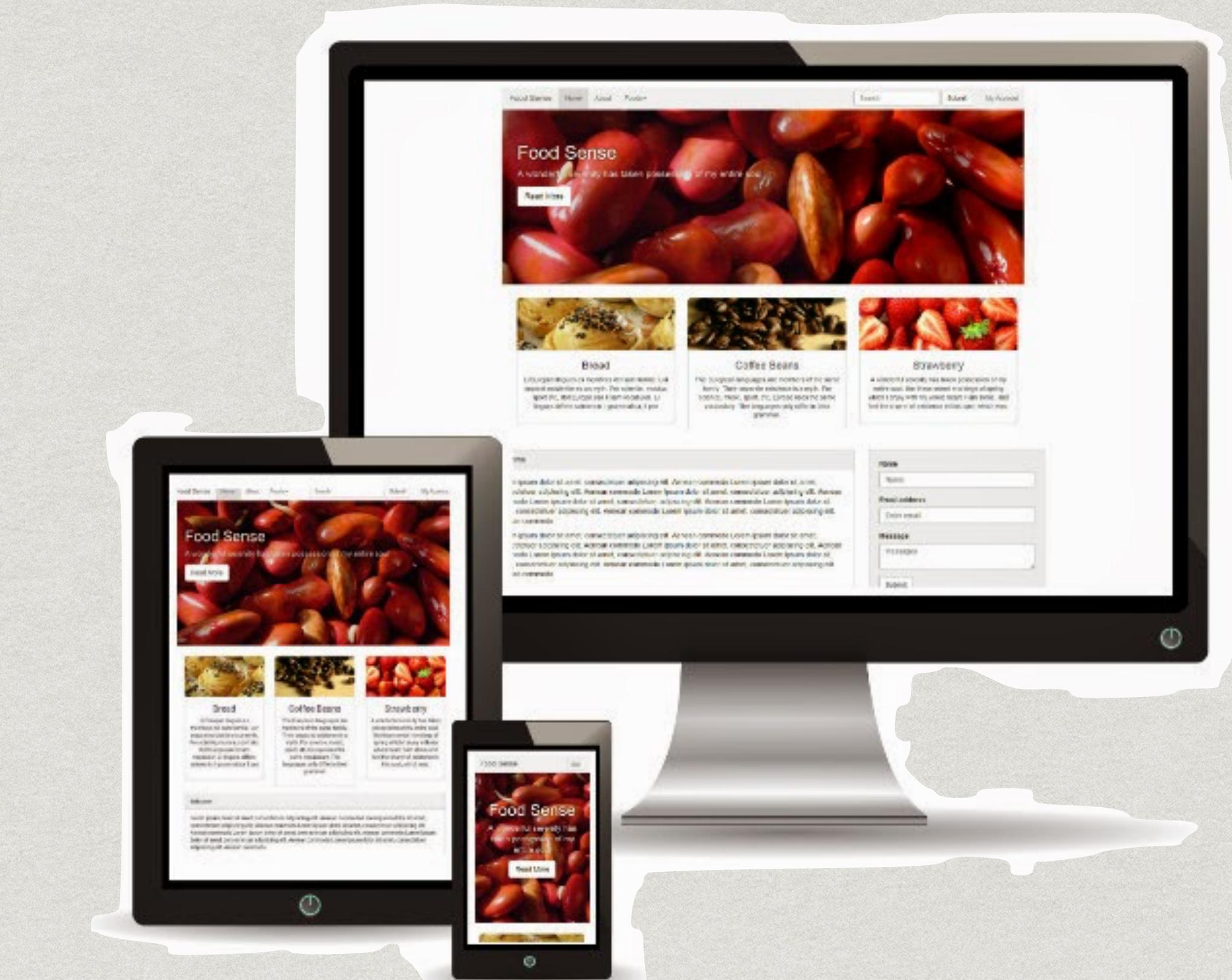
MARTIN & KENNY

Web Development

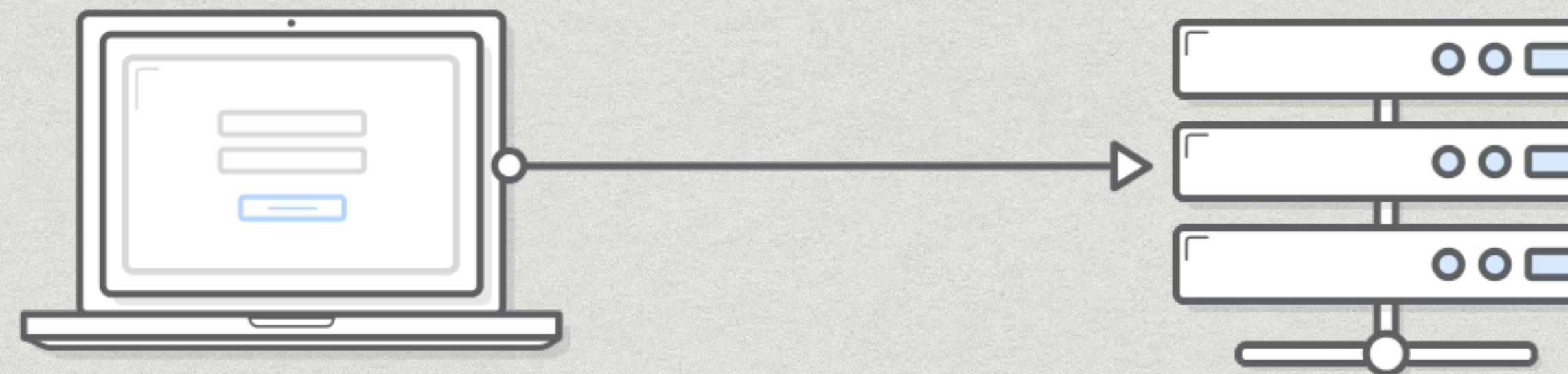


Responsive Web Design

- * One design **fitting all screen sizes.**
- * Content could be automatically re-arranged.



HTML Form Request and Handling



Log in with your email account

Email
somebody@example.com

Password
Password

Show password

Log In

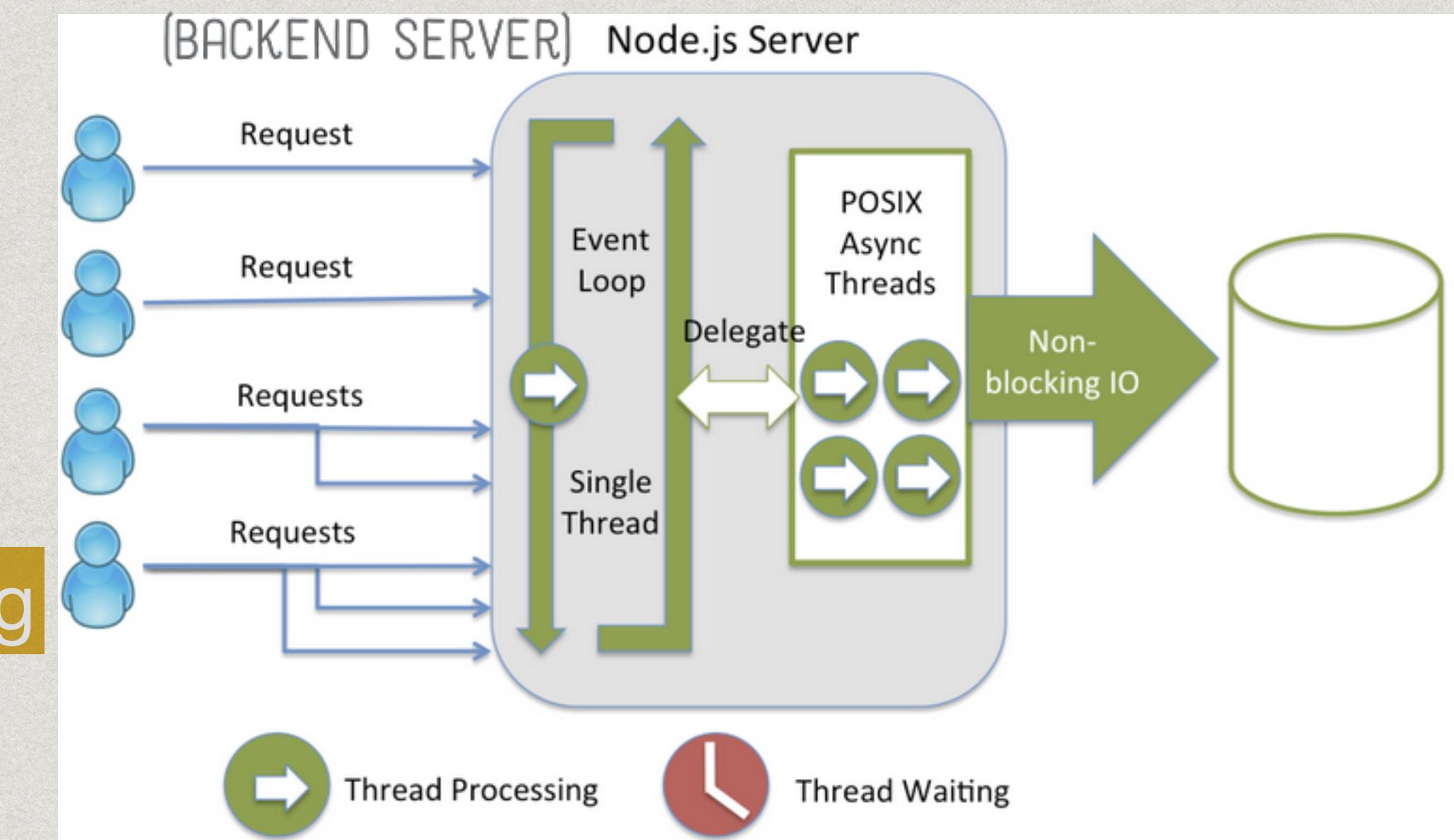
Forgot your password?

FORM ELEMENTS

(FRONTEND HTML & CSS)

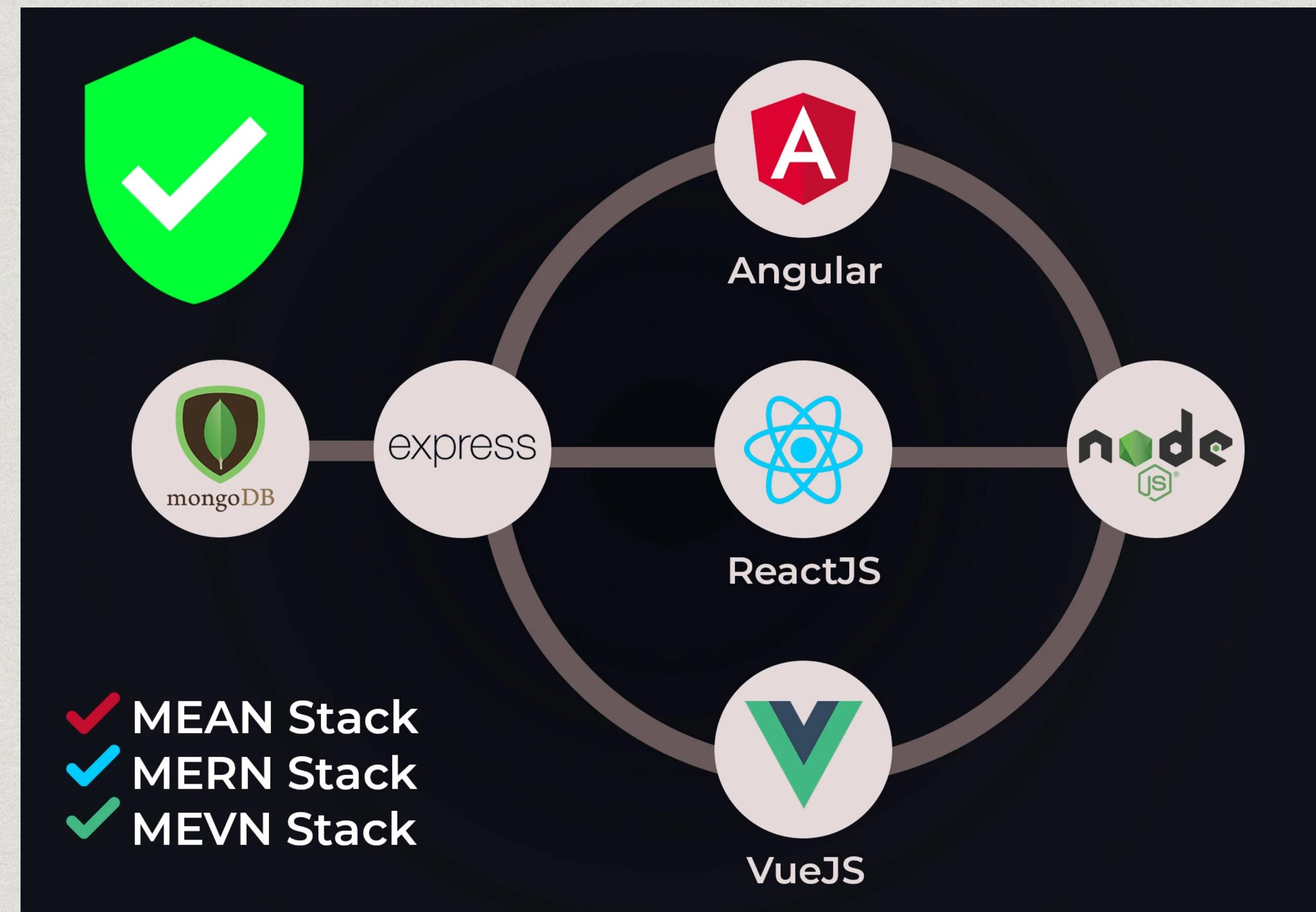
Server-side scripting

FORM PROCESSING



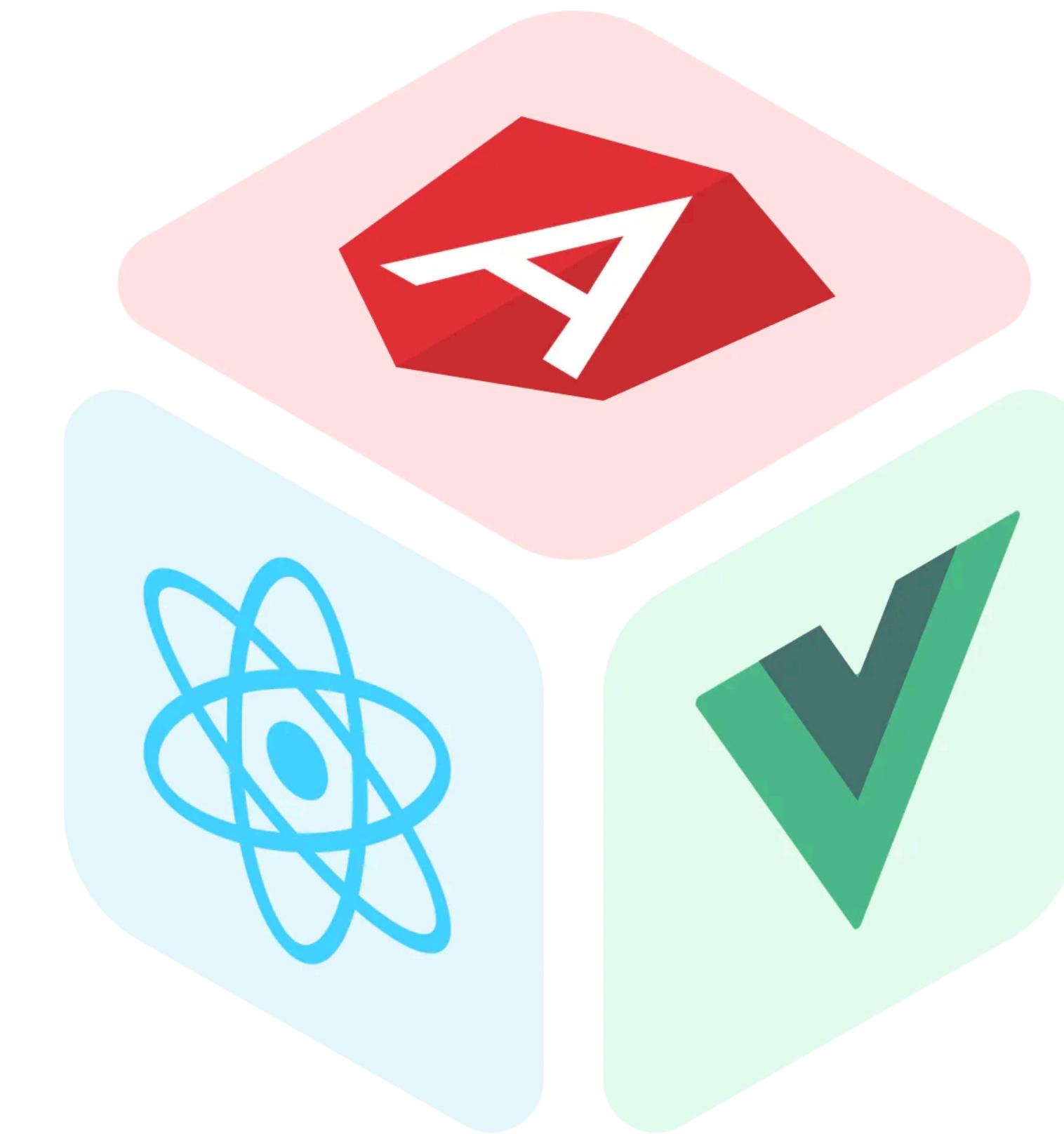
MEAN Stack

- * Full **JavaScript** stack
- * Frontend technologies like **AngularJS**, or **Vue.js**
- * No-SQL database with **MongoDB**



Hybrid Mobile App Development

- * Ionic Framework
- * Adopting **Vue.js** in mobile app development

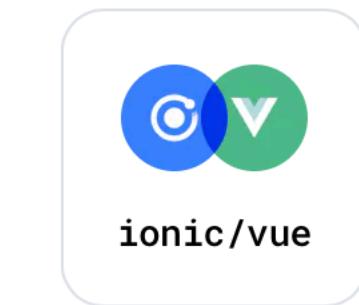


JS Agnostic

Use the JavaScript tech you prefer.

We don't make assumptions about the JS Frameworks you prefer to build with. That's why we engineered Ionic to integrate seamlessly with all best frontend frameworks, including Angular, React, Vue, or even no framework.

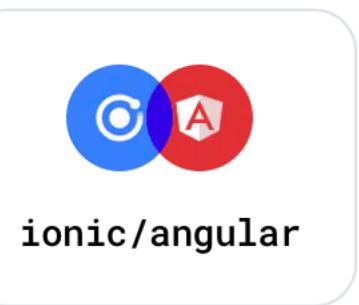
Get started:



ionic/vue



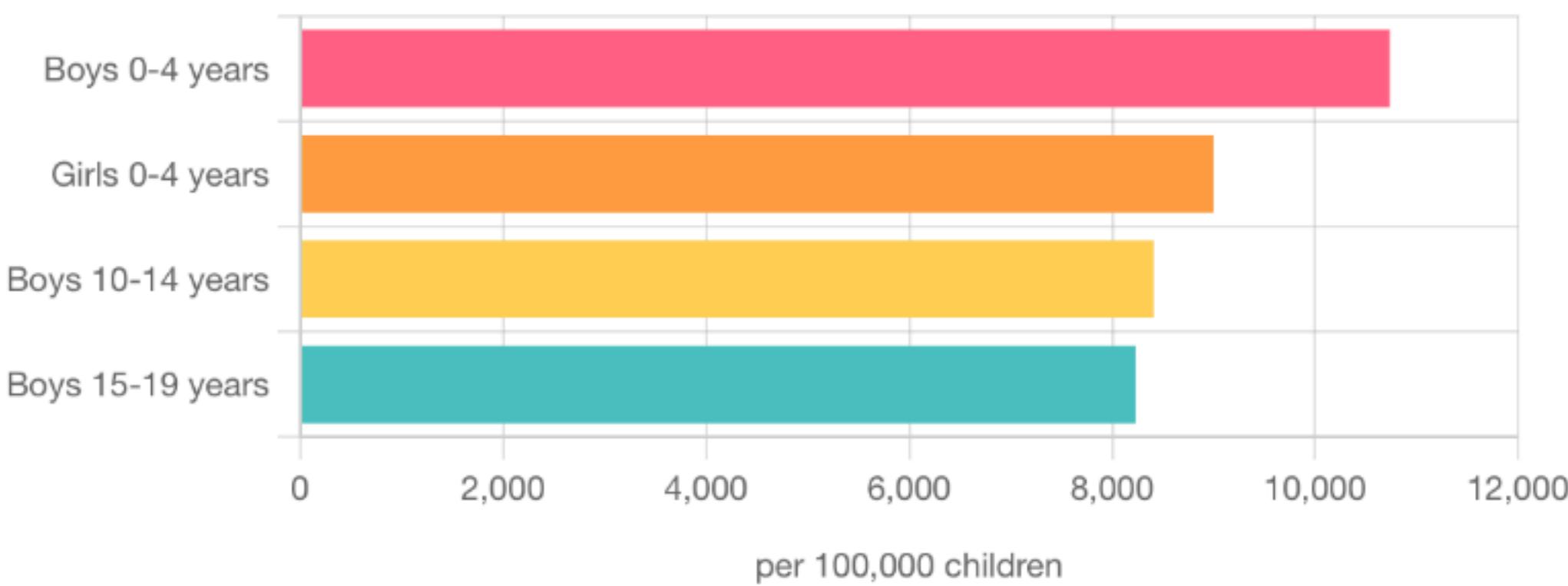
ionic/react



ionic/angular

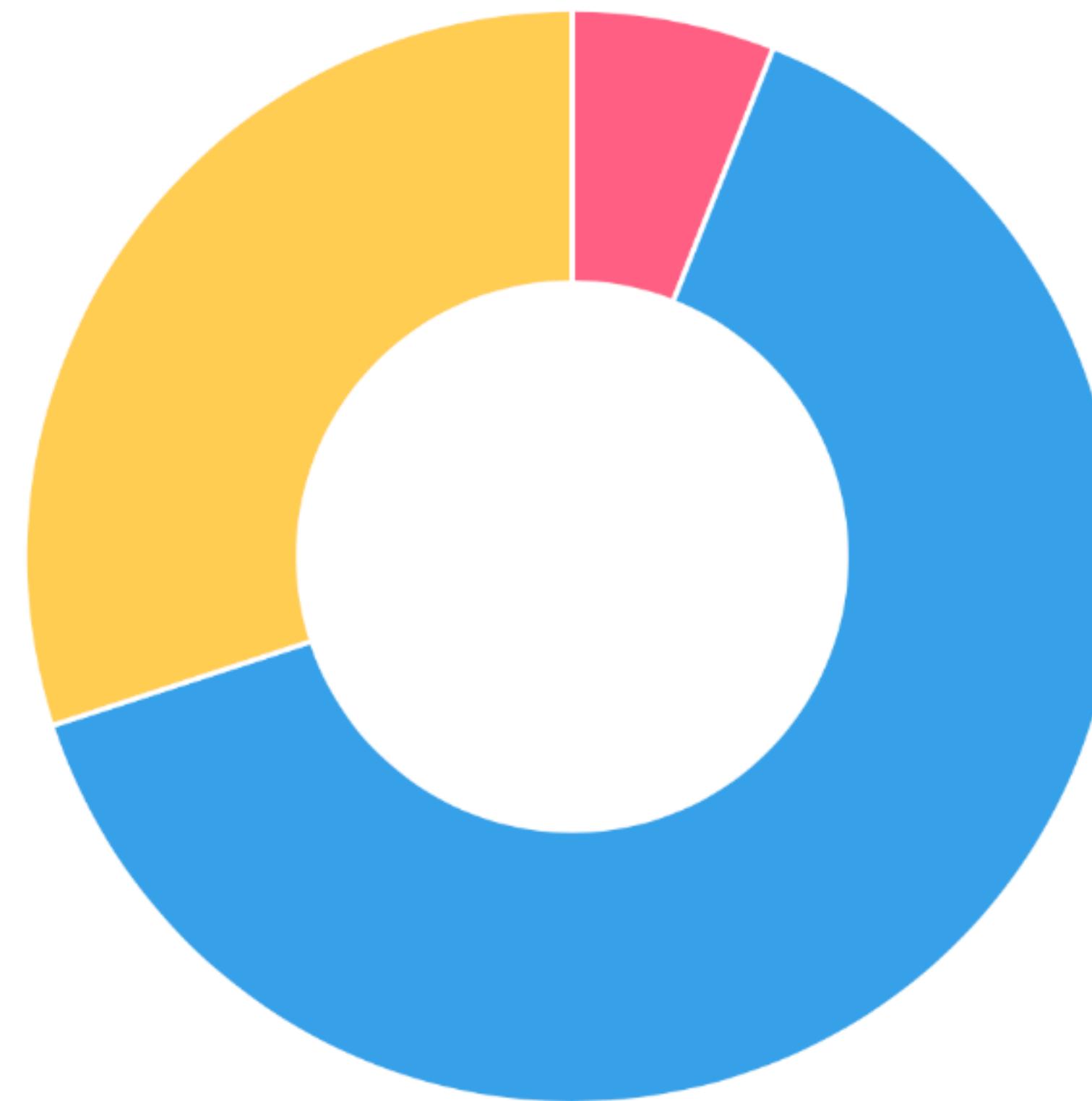
Simple Charts

Vulnerable Groups for Tai Po District

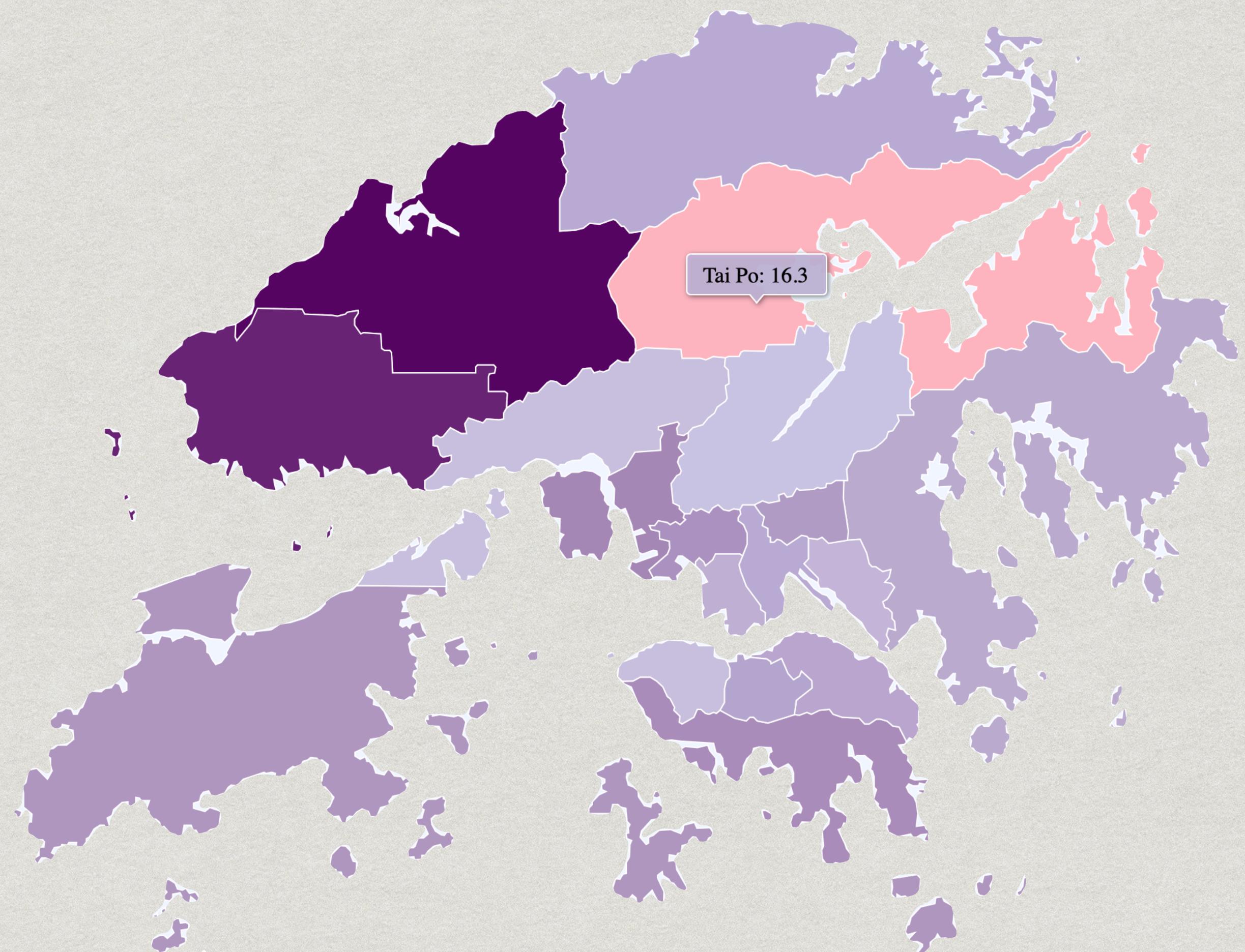


Intentional & Unintentional Injury

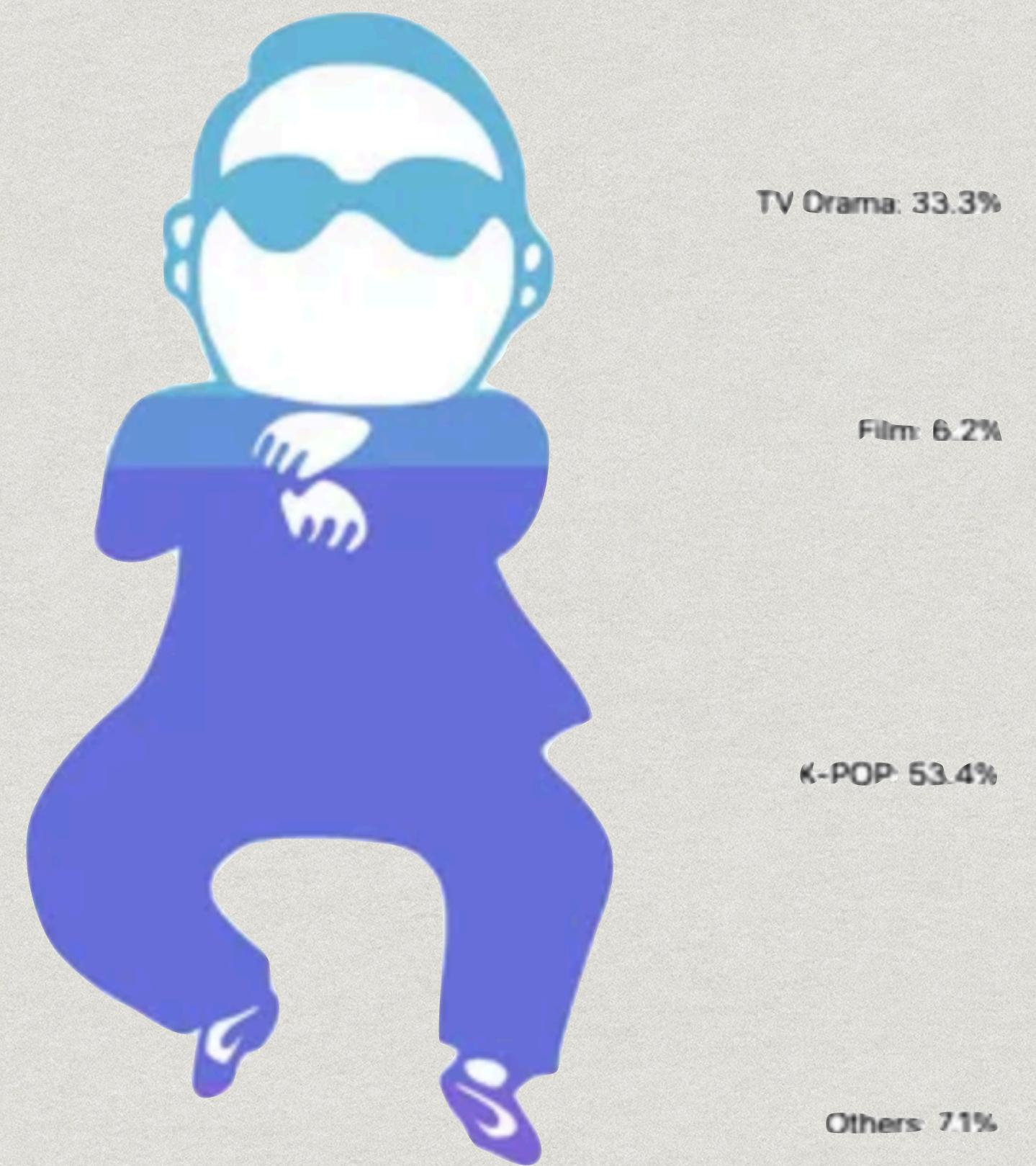
Intentional Unintentional Others



Amcharts



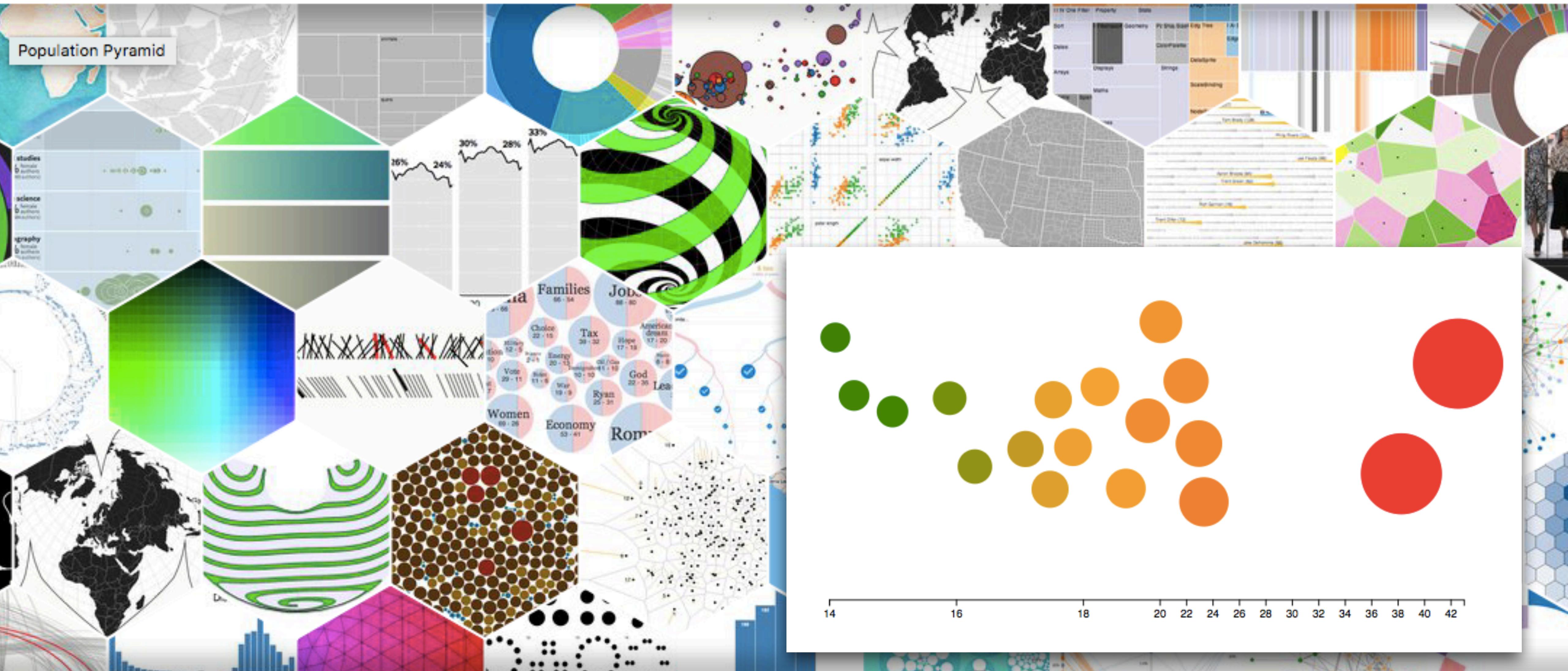
Hallyu that interests foreigners overseas





Data-Driven Documents

2D Data Visualization: <https://d3js.org>



TENTATIVE SCHEDULE

Tentative Course Structure

- * **Module 1** (First 3 weeks)
 - * Basic **HTML and CSS**
 - * **Responsive web design** with **Flexbox** and **Bootstrap**.
 - * Client side **JavaScript**

Tentative Course Structure

- * **Module 2** (Week 4 - 6)
 - * **Server-side scripting - Express.js**
 - * **Restful API and AJAX**
 - * Working with **NoSQL database** and System deployment

Tentative Course Structure

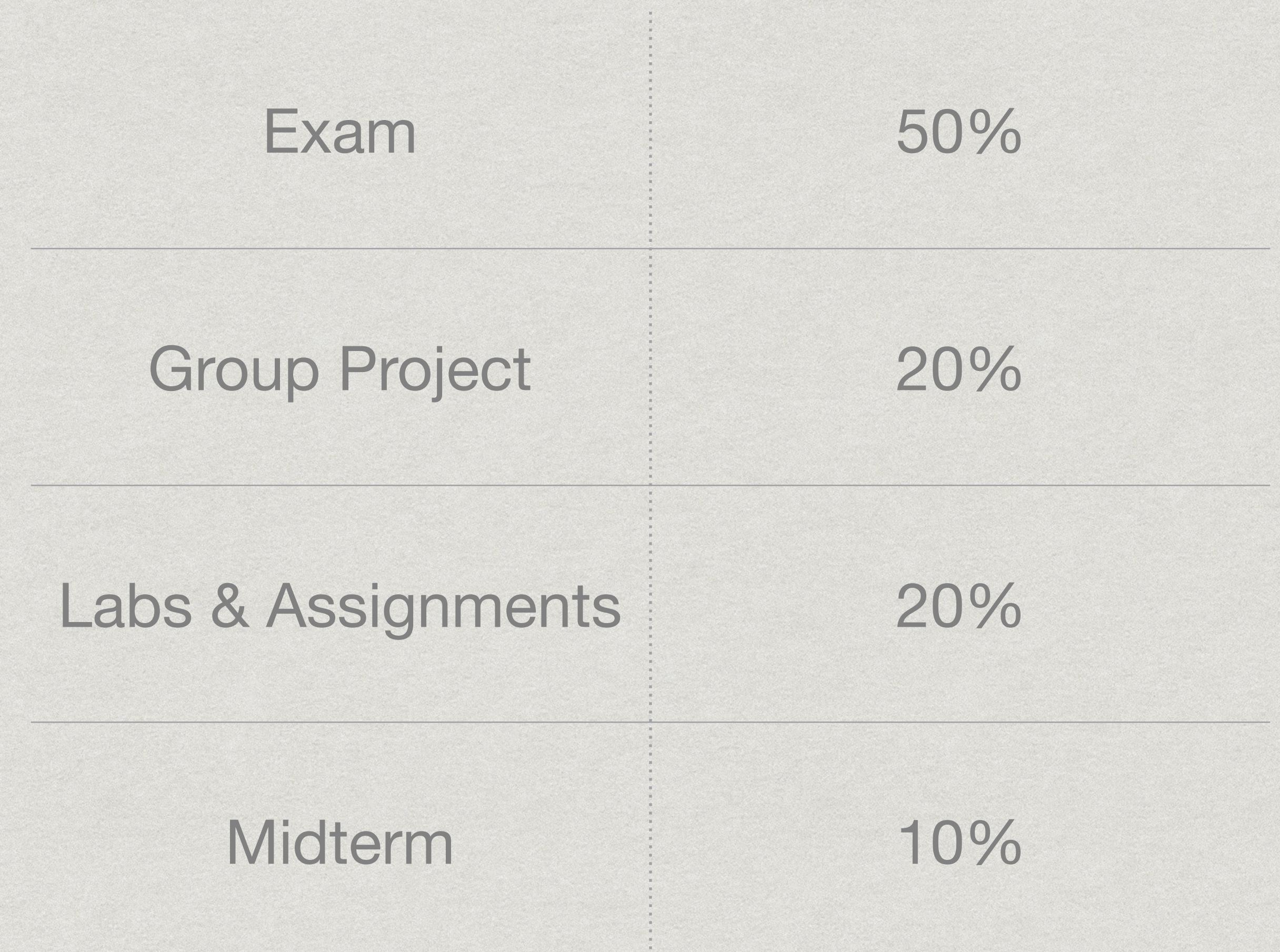
- * **Module 3** (Week 7 - 9)
 - * **Reactive** front-end framework with **Vue.js**.
 - * Simple **data visualization** with **apexcharts**.
 - * Mobile app development with **Ionic** + Vue.js.

Tentative Course Structure

- * **Module 4** (Week 10 - 12)
 - * **GitHub** source-code management
 - * More **data visualization** with **amCharts** and **d3.js**.
 - * Usage of **pre-trained AI models**.

Assessment

- * To pass this course, you'll need to achieve
 - * **30% of exam**
 - * **35% of the overall score**



Plagiarism

- * The University staunchly **upholds the principles of academic integrity.**
- * As one part of HKBU's effort to prevent plagiarism, the software Turnitin is used to compare all assignments against multiple sources whenever appropriate.
- * A report on each assignment is generated that includes a percentage similarity and links to specific similar sources.
- * Turnitin does not conclusively prove whether or not an assignment is plagiarized – **the faculty will make this determination.**