คพ494
หัวข้อพิเศษทางวิทยาการคอมพิวเตอร์ 1

ROUTER

COURSE OUTLINE

- ▸ Introduction
  - • instance, syntax, setup
- ▸ Interact with DOM
  - • binding, event, styling
- ▸ v-if, v-for
- ▸ Module
- ▸ Component
- ▸ FORM
- ▸ Animations
- ▸ Http
- ▸ **Routing**
- ▸ Vue Native

Standard Library

VUE ROUTER

▸ Vue Router is the **official router** for Vue.js.

- Nested route/view mapping
- Modular, component-based router configuration
- Route params, query, wildcards
- View transition effects powered by Vue.js' transition system
- Fine-grained navigation control
- Links with automatic active CSS classes
- HTML5 history mode or hash mode, with auto-fallback in IE9
- Customizable Scroll Behavior

VUE

IN THE REAL WORLD

REAL DEVELOPMENT VUE-CLI

▸ $ vue create mju-router

▸ $ cd mju-router

▸ $ npm run serve

▸ localhost:8080

```
? Please pick a preset:
  default (babel, eslint)
> Manually select features
```
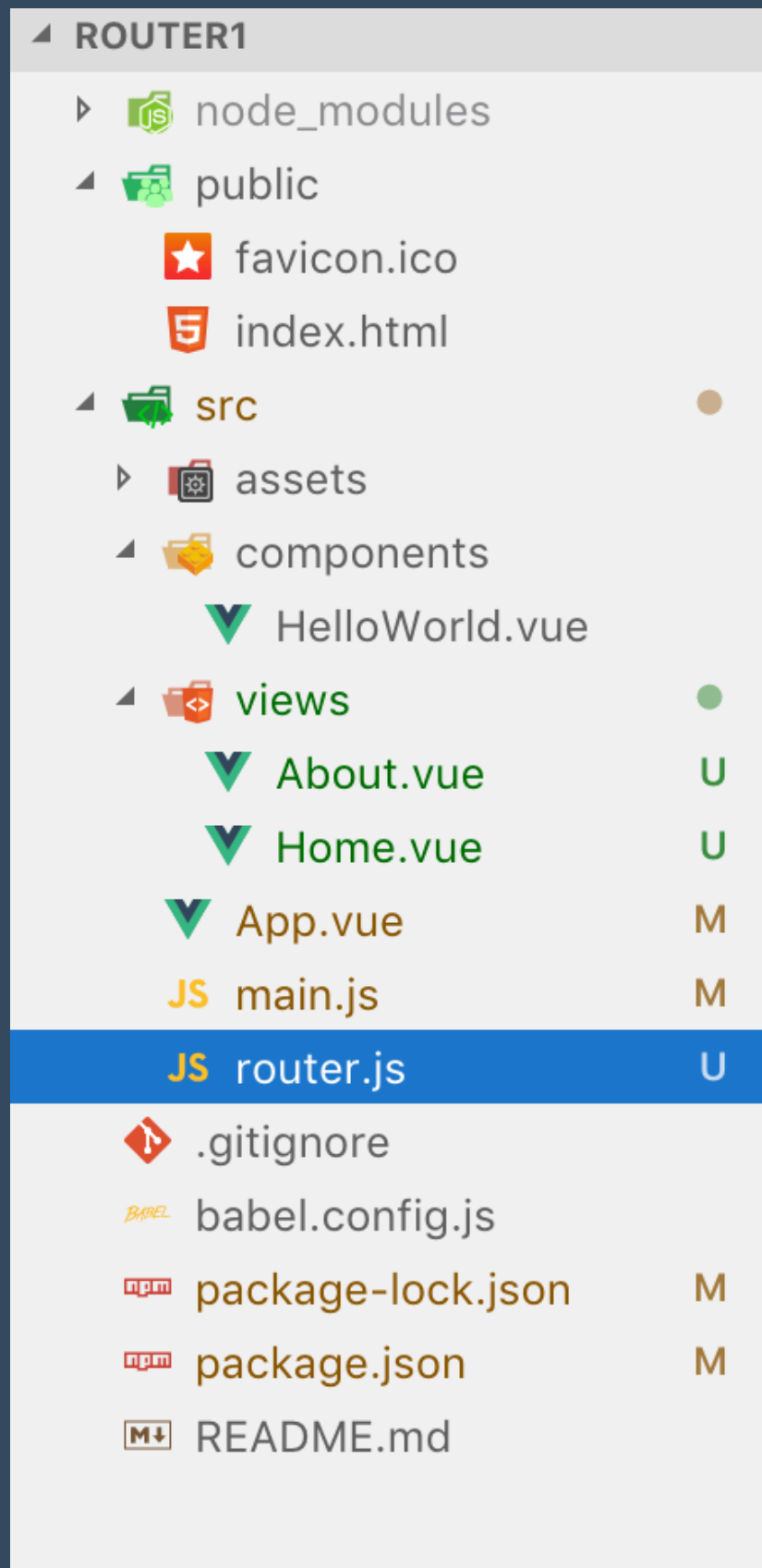
```
? Check the features needed for your project:
  ○ TypeScript
  ○ Progressive Web App (PWA) Support
  ◉ Router
  ◉ Vuex
  ○ CSS Pre-processors
> ◉ Linter / Formatter
  ○ Unit Testing
  ○ E2E Testing
```

★$ vue ui

★Install plugin/dependencies "vue-router"

VUE PROJECT

ROUTER1
- ▷ node_modules
- ▽ public
  - ⭐ favicon.ico
  - index.html
- ▽ src
  - ▷ assets
  - ▽ components
    - ⏷ HelloWorld.vue
  - ▽ views
    - ⏷ About.vue   U
    - ⏷ Home.vue   U
  - ⏷ App.vue   M
  - JS main.js   M
  - **JS router.js**   U
- .gitignore
- babel.config.js
- package-lock.json   M
- package.json   M
- README.md

▸ **node_modules** : libraries

▸ **public** : any <u>static assets</u> you don't want to be run through Webpack when we build our project

▸ **assets** : directory so they can be optimized by Webpack

▸ **components** : components, or building blocks, of our Vue app.

▸ **App.vue** : file is the root component that all other components are nested within

▸ **main.js** : file is what renders our App.vue component and mounts it to the DOM

★**views** : directory for views routing

★**router.js** : Routing Configuration file

App.vue

<div>

<router-link> →

<router-link> →

<router-link> →

<router-view>

GETTING STARTED

main.js

render (auto injected)
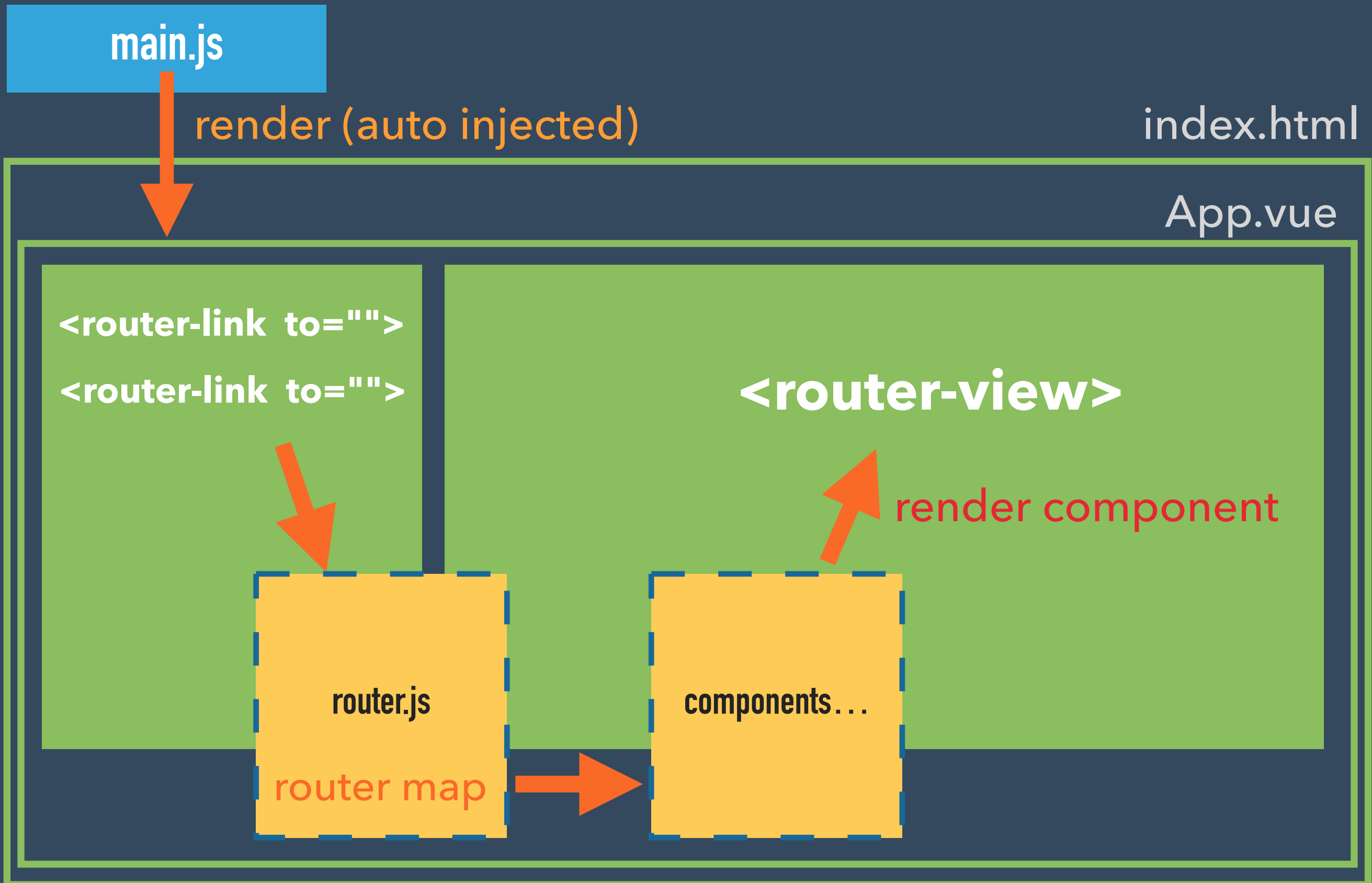
index.html

App.vue

render component

router.js

router map

components...

GETTING STARTED

<router-link to="...">

router mapping name

<a href="...">

router.js

```
import Router from 'vue-router'
import Home from './views/Home.vue'    // import components...

Vue.use(Router)
                                        // mapping components object...
export default new Router({
  routes: [{                           {
      path: '/',                           path: '/about',
      name: 'home',                        name: 'about',
      component: Home                      component: About
    },                                 }

]
})
```

```
{
    path: '/person',
    name: 'person',
    component: Person
}
```

ROUTER + LAZY LOAD

```js
import Vue from 'vue'
import Router from 'vue-router'

Vue.use(Router)

const routerOptions = [{
    path: '/signup',
    component: 'SignUp'
  },
  {
    path: '/signin',
    component: 'SignIn'
  },
  {
    path: '/',
    component: 'Home'
  }
]

const routes = routerOptions.map(route => {
  return {
    path: route.path,
    component: () => import('@/components/${route.component}.vue')
  }
})
```

LAZY LOAD :
- ถ้าต้องการใช้งาน COMPONENT ไหน ค่อยเรียกโหลด COMPONENT ย่อยนั้นมาในภายหลัง
- เพิ่มศักยภาพการทำงานของเว็บไซต์
- ลดการใช้งานหน่วยความจำเครื่อง CLIENT
- การโหลดข้อมูลจากฝั่ง SERVER แบบใช้เท่าที่จำเป็นต้องใช้งานเท่านั้น
- เพื่อให้เว็บไซต์สามารถเข้าสู่หน้าเว็บในโหมดการใช้งานปกติได้เร็วขึ้น

```js
export default new Router({
  mode: 'history',
  routes
})
```

DYNAMIC ROUTE

id : 001   id : 002   id : 003   id : 003

Product Detail Component

DYNAMIC ROUTE

```javascript
const router = new VueRouter({
  routes: [
    // dynamic segments start with a colon
    {
      path: '/product/:id',
      component: Product
    }
  ]
})
```

```html
<router-link :to="'/product/' + product.id">
    {{ product.name }}
</router-link>
```

```
@click="goTodetail(product.id)"
```

Routing by method

```javascript
methods: {
    goTodetail(proId) {
      // this.$router.push({name:'product'});
      this.$router.push({ name: "product", params: { id: proId } });
    }
  },
```

TIME TO PRACTICE

▸ https://medium.freecodecamp.org/how-to-use-routing-in-vue-js-to-create-a-better-user-experience-98d225bbcdd9