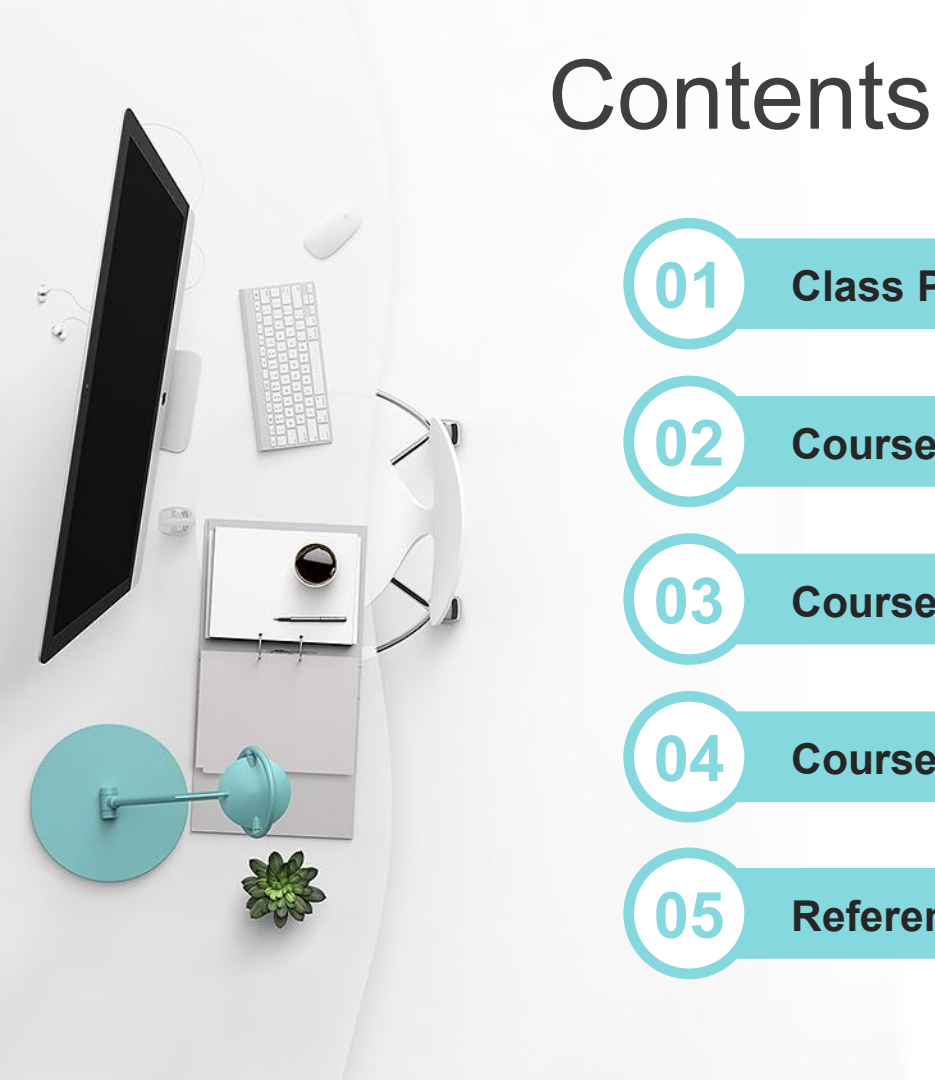
Advanced Web Programming

Ung Văn Giàu
Email: giau.ung@eiu.edu.vn



Contents

1. Class Policy

1. Class Policy

- No phone ring, no calling, no texting
- No gaming or chatting or other activities not related to the course

- **EIU Moodle**
  Lessons, assignments and notice will be posted here

- Don’t submit Assignments via Email if not requested

- **Late Submission** (only exercises and labs)
  - 2^{nd}, 3^{rd}, ..., n^{th} late times will be minus **(n – 1) x 10** grade
  - No late more than 01 day

1. Class Policy

1. Class Policy

- **Encourage to:**
  - Directly contact
    - ✓ In class
    - ✓ By appointments

      Email: **giau.ung@eiu.edu.vn**
  - Discuss

- **Reference**
  - **Copying in any form will lead to penalties**
  - Any reference obtained from the Internet must be properly cited

2. Course Evaluation

- **Formative score** = **10%** (Attendance + Discussion) **+ 40%** Assignments
- **Final score = 50% Formative + 50% Final exam**

- **Not allowed to take the final exam:**

  Absence more than 20%

3. Course Introduction

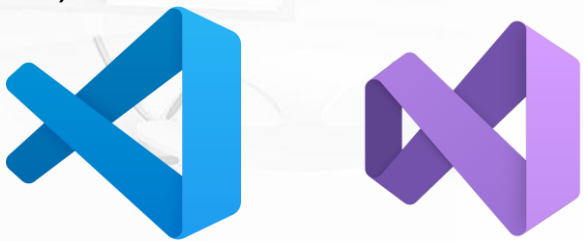
3. Course Introduction

Prerequisite course:

- CSE 307 – Web Programming
- CSW 304 – Front-end Development

Required tools:

- Visual Code
- Visual Studio (Recommended)



3. Course Introduction

Description

The course provides students with the necessary knowledge to complete more complex web applications, and allows easier expansion using React combined with TypeScript.

This knowledge includes:

- Introduction to TypeScript;
- Techniques for building small, isolated and highly reusable components;
- Routing techniques;
- Style techniques (CSS);
- Common Hooks;

3. Course Introduction

Description

The course provides students with the necessary knowledge to complete more complex web applications, and allows easier expansion using React combined with TypeScript.

This knowledge includes:

- State management techniques;
- Techniques for manipulation, processing and validation using forms;
- Interacting techniques with RESTful APIs: Fetch, Axios,...
- Introducing tools, languages, and libraries to help detect errors early, analyze errors and refactor source code.
- Unit testing;

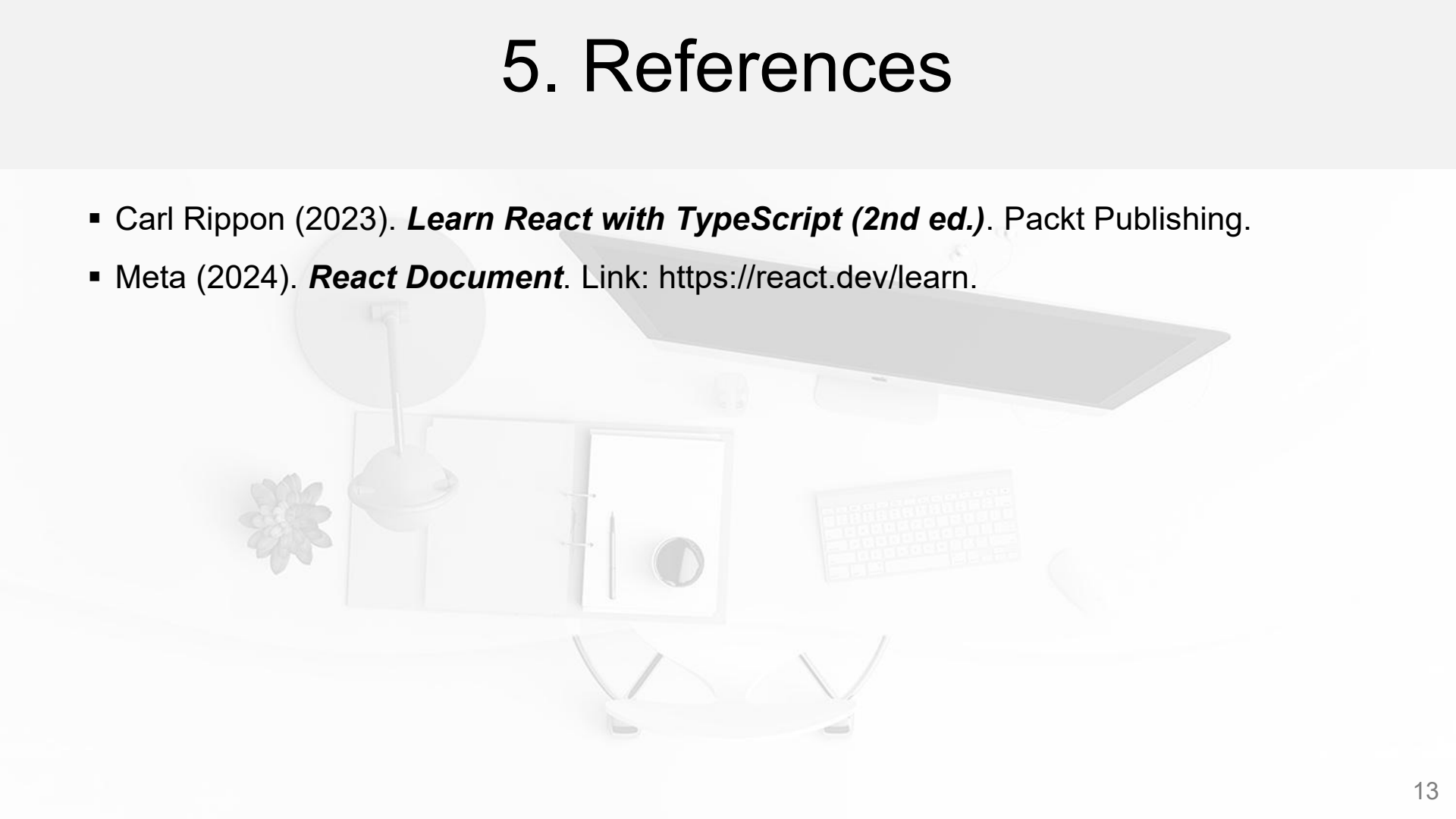
4. Course Objective

After completing the course, students can achieve the following goals:

- Understand concepts, techniques, architecture,... in modern web application development.
- Analyze / Separate components of web applications
- Apply routing techniques, styles, module separation, common Hooks, state management techniques, form manipulation and validation techniques.
- Apply API communication techniques.
- Analyze errors, and apply source code refactoring techniques, and unit testing.

5. References

- Carl Rippon (2023). ***Learn React with TypeScript (2nd ed.)***. Packt Publishing.
- Meta (2024). ***React Document***. Link: https://react.dev/learn.




Q&A