FULL STACK WEB DEVELOPMENT PROGRAM

Lecture 0: Orientation

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OVERVIEW

- Timeline
- Weekly Routine
- Assignment
- Key Performance Indicator
- Policies
- Learning 101
- Coding 101

TIMELINE

- **Week 1-2**: HTML, CSS, JavaScript.
  - Evaluation

  Week 2-3: Node.js.
  - Personal Project

  Week 4-5: React
  - Personal Project 2

  Week 6: Group Project

- Resume

  Mock Interviews

  Marketing

  Offer 🎉

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WEEKLY ROUTINE (MANDATORY)

- **Every morning**: Check-in through Slack before 9:00 AM

- Monday
  ~ 9:30AM - 10:50AM: Coding Mock
  ~ 11:05AM - 11:30PM: Short Answer Mock
  ~ 1:00PM - ? : 1-on-1 Meetings (~20 mins)

- Tuesday - Friday
  ~ 10:00 AM -12:00 PM: Lecture (slides and assignments uploaded ~24hours before)
  ~ 4:20PM - 6:00PM: Standup Meetings (~20-30 mins)

ASSIGNMENT

- **Assignments**: short answer questions (SAQ) and coding questions.
  - Designed to be like real interviews

- **Submission**: On the training portal, upload a compressed .zip file.
  - Naming convention: WeekXDayX-FirstName LastName
  - Assignments are due the next day by 9AM.
  - Late submissions are not allowed.

- **Incompleteness**: Always attempt to solve each problem and submit what you have before the deadline.
  - Leave comments on the portal about any issues you faced.
  - Don't stress! Learn as much as you can.

Short Answer:

Answer the following questions with complete sentences in your own words. You are encouraged to conduct your own research online or through other methods before answering the questions. If you research online, please consult multiple sources before you write down your answers.

1. What is HTML
2. What is charset
3. What is block element
4. What is inline element
5. What is a tag
6. What would happen if <a href='javascript:void(0)' />
7. What is iframe
8. What is css
9. How to import css
10. What are different types of css selector
11. What are different types of attribute selector
12. What is pseudo-class
13. What is pseudo-element
14. What is SVG and why we use SVG

Coding Questions:

Write code in JavaScript/HTML/CSS to solve following problems. Please write your own answers. You are highly encouraged to present more than one way to answer the questions. Please follow best practice when you write the code so that it would be easily readable, maintainable, and efficient. Clearly state your assumptions if you have any. You may discuss with others on the questions, but please write your own code.

1. Design the table:
   Implement the following table with HTML&CSS (hint: colspan & rowspan)

My Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
Breakfast	In lair	with cronies	In lair	in lair	in lair
Morning	Design traps		Improve Hideout		
Afternoon	train minions	train minions	train minions	train minions	world domination
Evening	manaical laughter	manaical laughter	manaical laughter	manaical laughter	

POLICIES

- Plagiarism is **FORBIDDEN**.
- **Be self-motivated**: We cover almost everything that will appear in interviews, but you should actively research relevant topics and practice core concepts.
- **Asking questions**: Before reaching out to others for help, prepare specific questions:
  - What is the exact issue you're having?
  - What do you think is the problem?
  - What have you tried?

LEARNING 101

When coming across a new concept, ask yourself these questions and try to explain it to yourself, as if you were not a programmer.

1. What do I not understand?
2. What is it or what does it mean?
3. Why/how is it important?
4. What is it used for?
5. How do you use it or implement it?
6. (If applicable) What is the exact syntax?

If you don't know the answer, you should Google it.

CODING 101

When presented with a problem, ask yourself these questions and try to explain it to yourself, as if you were not a programmer.

1. What is the question asking for? What should happen?
2. Do I have any constraints?
3. What are the inputs? What data/information am I working with?
4. What are the outputs? What should be returned or displayed?
5. Have I seen/done anything before that might have the same behavior or result?
6. Given the inputs, what is supposed to happen step-by-step?
7. What are some test cases that I should consider?

Start coding.

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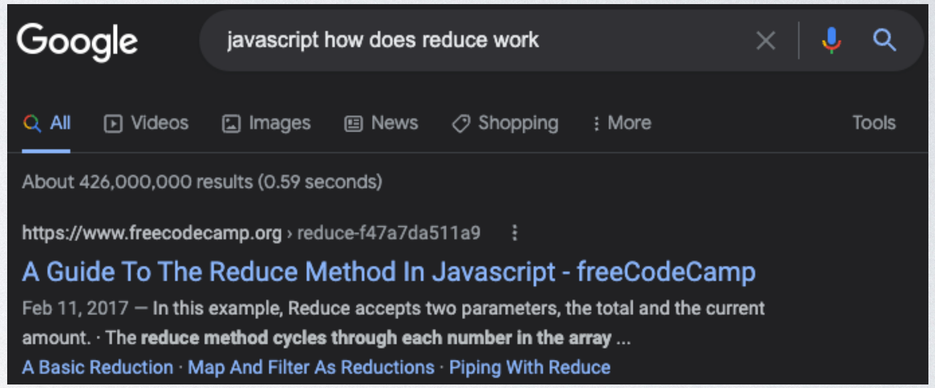
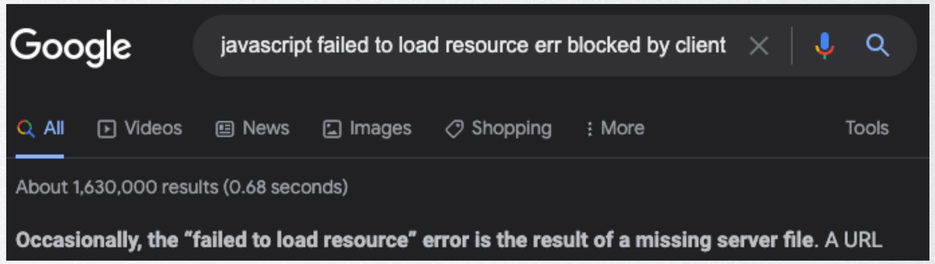
CODING 101

While coding:

1. Think of more questions.
    1. What does this code do? => print/console.log variables and function outputs
    2. How does this function work? => Google and **read** the documentation.
        1. What are its input parameters and return values?
        2. Do I invoke this function on some variable, or is it used alone?
    3. Error? **Read** the error message and Google it.

2. When using Google, make your questions as specific as possible.
3. Implement working code, add comments explaining to yourself what is happening or why it works.
4. Run your code to see that it compiles and does what you want it to do.
5. Stuck? Take a break and come back later.
6. Repeat from step 1.





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TOOLS

- **Code Editor**: VSCode
  - https://code.visualstudio.com/download
- **CSS Preprocessor**: SASS
  - https://sass-lang.com/install
- **Backend JS Runtime**: Node
  - https://nodejs.org/en/download/
- **Version Control System**: Git
  - https://git-scm.com/downloads
- **Code-hosting Service**: GitHub

ANY QUESTIONS?