

Introducere in Web development

Curricula cursului

	Topic
Lab 1	Introduction to web development <ul style="list-style-type: none">• Introduction to hardware, software, networking, internet and cloud• Environment setup: VSCode, Node & NPM Introduction to HTML, CSS and Javascript <ul style="list-style-type: none">• Understand how these three technologies work together• Build your first one page website and deploy it to the cloud
Lab 2	Introduction to HTML <ul style="list-style-type: none">• What is HTML• HTML tags• HTML attributes• HTML page structure• Build a static web page with HTML
Lab 3	Introduction to CSS <ul style="list-style-type: none">• What is CSS• Syntax• Selectors• Specificity• Ways to insert CSS• Style a static web page with HTML
Lab 4	CSS properties <ul style="list-style-type: none">• Colors• Backgrounds• Borders• Typography• Layout• Positioning• Box model
Lab 5	Flexbox <ul style="list-style-type: none">• The flex display type• Direction• Horizontal and vertical alignment

	<ul style="list-style-type: none"> • Sizing • Wrapping
Lab 6	Transitions and animations <ul style="list-style-type: none"> • Transforms • Transitions • Animations
Lab 7	Media queries <ul style="list-style-type: none"> • How to use media queries to build responsive websites • Defining query rules • Defining breakpoints (device type vs. content based)
Lab 8	Introduction to Javascript - Part I. <ul style="list-style-type: none"> • What is Javascript • Syntax • Data types • Functions • Objects
Lab 9	Introduction to Javascript - Part I. <ul style="list-style-type: none"> • Conditions • Switch statements • Loops • Scope • Debugging
Lab 10	The Document Object Model (DOM) <ul style="list-style-type: none"> • What is the DOM • Ways of finding DOM elements • Changing the DOM dynamically • Listening and reacting to events
Lab 11	The Browser Object Model (BOM) <ul style="list-style-type: none"> • Window • Screen • Location • History • Navigator • Timing • Cookies
Lab 12	ES6 features <ul style="list-style-type: none"> • Arrow functions • Template literals • Destructuring • Spread & Rest • Promises

	<ul style="list-style-type: none"> • Symbols • Classes • Async / Await
Lab 13	Building a contact form with HTML, CSS and JS - Part I <ul style="list-style-type: none"> • Create the HTML structure • Style the page • Make the page responsive
Lab 14	Building a contact form with HTML, CSS and JS - Part II <ul style="list-style-type: none"> • Validate the form • Read the form values • Submit the form
Lab 15	Introduction to React <ul style="list-style-type: none"> • Introducing JSX • Embedding expressions • Specifying attributes • Components and props
Lab 16	State, component lifecycle and events <ul style="list-style-type: none"> • How to use internal state • The power of lifecycle events • Listening to events
Lab 17	Lists, keys and forms <ul style="list-style-type: none"> • Rendering lists with keys • Controlled vs. uncontrolled components • Rendering and interacting with forms
Lab 18	Hooks <ul style="list-style-type: none"> • Why hooks are important for async rendering • The state hooks • The effect hook • Effects with cleanup and conditional execution
Lab 19	Introduction to Redux <ul style="list-style-type: none"> • Redux concepts • The three principles of Redux • Using Redux with React • Redux middlewares
Lab 20	Routing in React <ul style="list-style-type: none"> • Basic routing • URL params • Query params • Advanced routing

Lab 21	Building with React <ul style="list-style-type: none">• Build a simple Todo application using React & Redux
Lab 22	Deploying a React application to cloud <ul style="list-style-type: none">• Understand how Webpack creates a build• Deploy our application to Now• Deploy our application to AWS (S3, Cloudfront and Route 53).