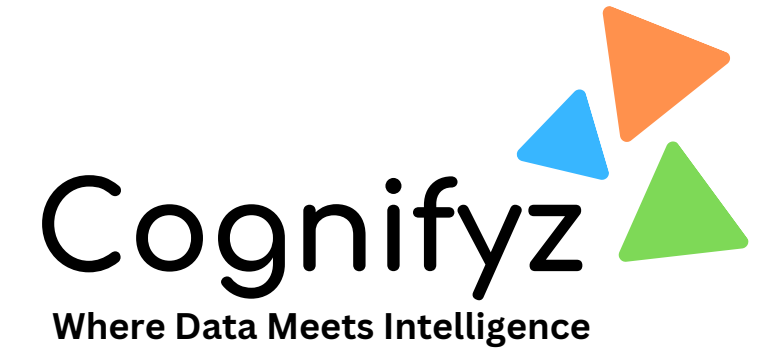# Cognifyz

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INTERNSHIP PROGRAM
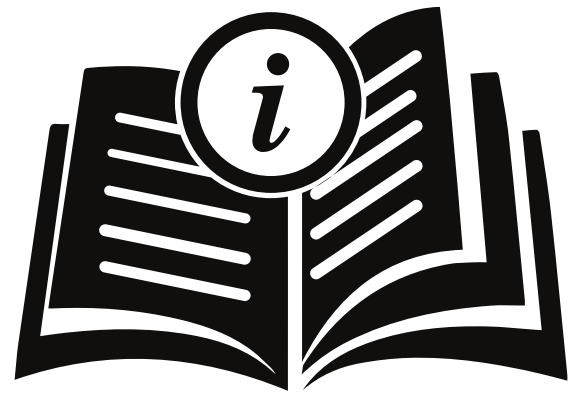
FULL STACK DEVELOPMENT

About Us

- Cognifyz Technologies is a leading technology company that specializes in the dynamic field of data science and excels in delivering impactful projects and solutions.

- The company offers a wide range of products and services, including artificial intelligence (AI), machine learning (ML), and data analytics tools.

- Cognifyz Technologies also provides training programs to enhance skills and knowledge in these areas.

- The company focuses on delivering innovative and cutting-edge solutions to meet the evolving needs of businesses.

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MSME

Micro, Small, & Medium Enterprises

सूक्ष्म, लघु, एवं मध्यम उद्योग

MSME BUSINESS FORUM

During your internship tenure, it is important to keep in mind the following points

- Enhance your professional presence by updating your LinkedIn profile. Share your achievements, such as the offer letter or internship completion certificate, which you received from us. Don't forget to mention and tag Cognifyz Technologies in your posts. You can use hashtags like #cognifyz #cognifyzTech #cognifyzTechnologies to showcase your affiliation.

- Maintain academic integrity and respect intellectual property. Plagiarism and copying code are serious offenses that can lead to the termination of your internship and subsequent restriction from future opportunities with us.

- Demonstrate your work by sharing a video showcasing the completion of your tasks on LinkedIn. Remember to tag Cognifyz Technologies in your post and use relevant hashtags like #cognifyz #cognifyzTech #cognifyzTechnologies to engage with our community.

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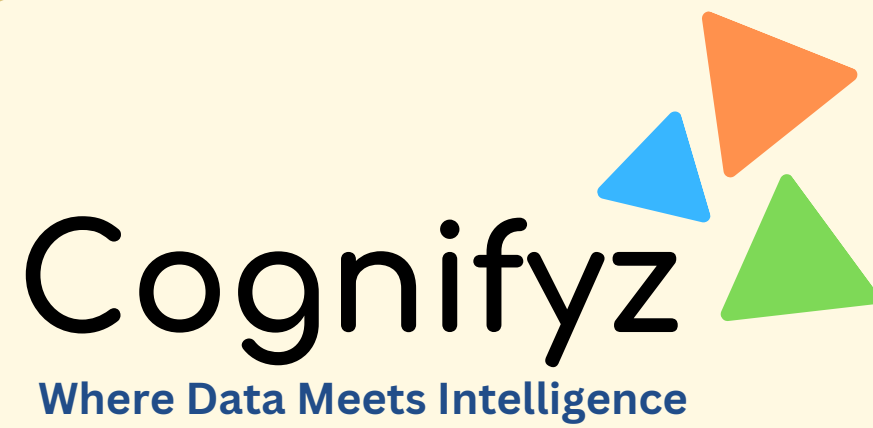
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SUBMISSION

- Create a professional video showcasing your internship projects and achievements.

- Host the video on LinkedIn to provide proof of your work and establish credibility among your peers. Consider tagging Cognifyz Technologies in your posts to ensure they are notified of your work.

- A SUBMISSION FORM will be shared later. Till then please continue your task and make a septate file of each level.

- When posting the video on LinkedIn, include the following hashtags to maximize visibility and engagement: #cognifyztechnologies #cognifyz #cognifyztech. Additionally, depending on your internship domain.

RULES
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FULL STACK DEVELOPMENT

TASK LIST

Welcome to our exciting Full Stack Development internship program! To complete this internship, you will need to finish at least 5 tasks out of 8. We've designed these tasks to cater to your convenience and ensure an engaging and rewarding experience. Additionally, completing all tasks will further enhance your chances of receiving a stipend.

Level 1: Beginner

Task 1: HTML Structure and Basic Server Interaction

Objective: Introduce the concept of server-side rendering and basic form submissions.

Steps:
1. Create an HTML structure with forms for user input.
2. Set up a simple Node.js server using Express.
3. Create server-side endpoints to handle form submissions.
4. Use server-side rendering (e.g., EJS) to dynamically generate HTML.

Level 1: Beginner

Task 2: Inline Styles, Basic Interaction, and Server-Side Validation

Objective: Expand inline styles and introduce server-side validation for form submissions.

Steps:

1. Extend HTML with more complex forms and user interactions.
2. Utilize inline JavaScript for client-side form validation.
3. Implement server-side validation for submitted form data.
4. Store validated data in temporary server-side storage.

Level 2: Intermediate

Task 3: Advanced CSS Styling and Responsive Design

Objective: Enhance CSS styling and make the webpage fully responsive.

Steps:

1. Create a more complex layout with multiple sections.
2. Experiment with CSS properties for advanced styling (e.g., transitions, animations).
3. Utilize a CSS framework (e.g., Bootstrap) for a consistent and responsive UI.

Level 2: Intermediate

Task 4: Complex Form Validation and Dynamic DOM Manipulation

Objective: Extend form validation and implement dynamic updates to the DOM.

Steps:

1. Enhance form validation to include more complex rules (e.g., password strength).
2. Dynamically update the DOM based on user interactions using JavaScript.
3. Implement client-side routing for a smoother user experience

Level 3: Advanced

Task 5: API Integration and Front-End Interaction

Objective: Introduce server-client communication through a RESTful API.

Steps:

1. Create RESTful API endpoints on the server for handling CRUD operations.
2. Develop a front-end interface that interacts with your own server API.
3. Fetch and display data from your API on the front end.

Level 3: Advanced

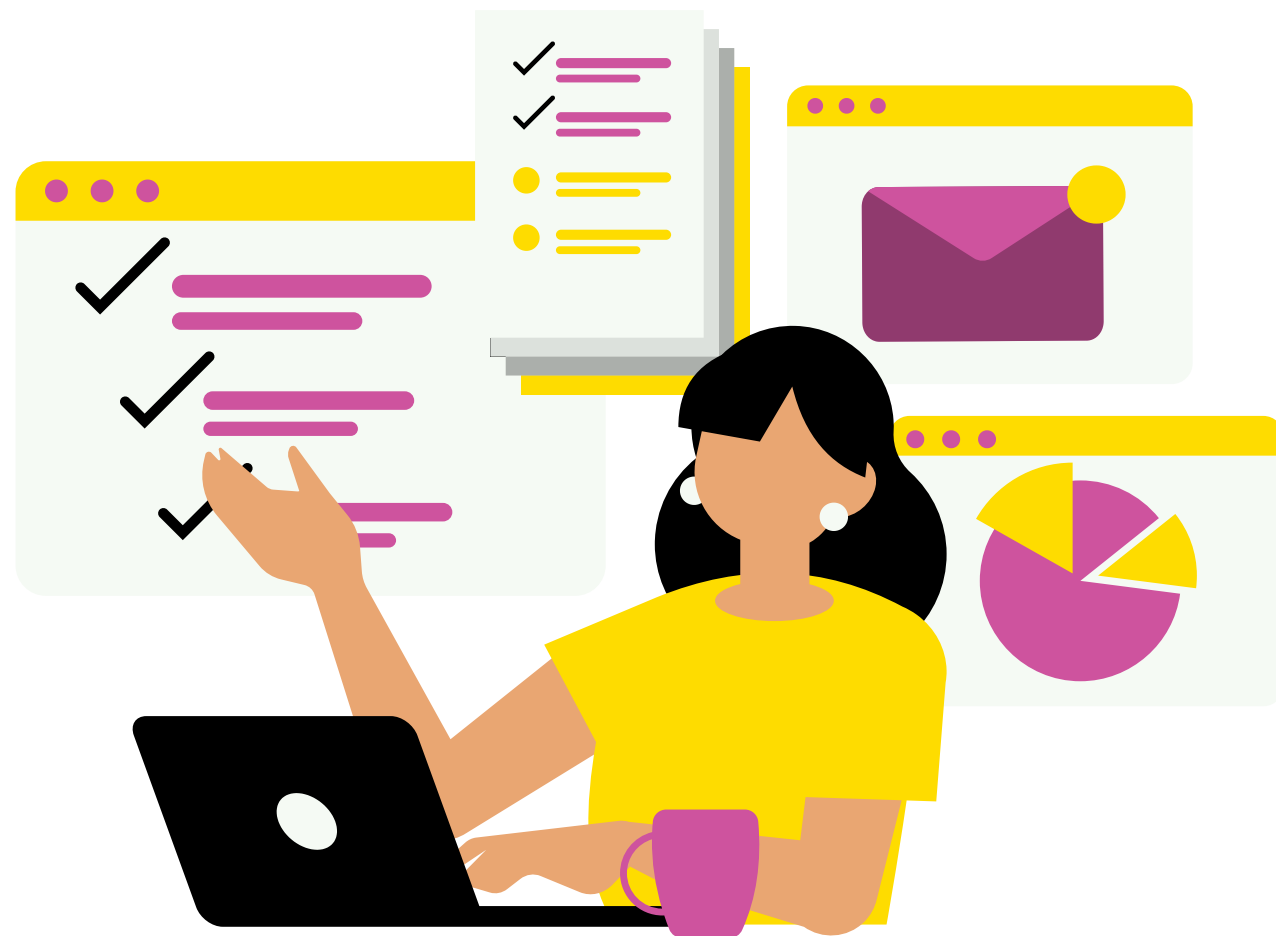**Task 6: Database Integration and User Authentication**

Objective: Integrate a database and implement user authentication for secure data handling.

Steps:

1. Integrate a database (e.g., MongoDB, MySQL) for storing and retrieving form data.
2. Implement user authentication on the server.
3. Secure your API endpoints by adding authorization checks.

Level 4: Expert

Task 7: Advanced API Usage and External API Integration

Objective: Explore advanced API concepts and integrate external APIs.

Steps:
1. Investigate concepts like OAuth for secure API authentication.
2. Integrate an external API (e.g., third-party services) into your application.
3. Implement advanced API features such as rate limiting and error handling.

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Level 4: Expert

Task 8 Advanced Server-Side Functionality

Objective: Implement advanced server-side features for a robust application.

Steps:

1. Introduce middleware for request processing (e.g., body parsing, logging).
2. Implement background tasks or job processing using tools like Redis or a task queue.
3. Explore server-side caching mechanisms for optimized performance.

How to Contact Us?

To find out more information, please contact us

in @cognifyz-Technologies

✉ contact@cognifyz.com

🌐 www.cognifyz.com

📷 @cognifyz_tech

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