

DYC

DECODE YOUR COURSE

AI POWERED LEARNING PLATFORM FOR PROGRAMMING

Presented by,

B.SAM (C22UG132CSC040)



SYNOPSIS

- **Smart Learning Platform**
- **Simplified Programming Concepts**
- **Interactive Learning [AI Powered]**





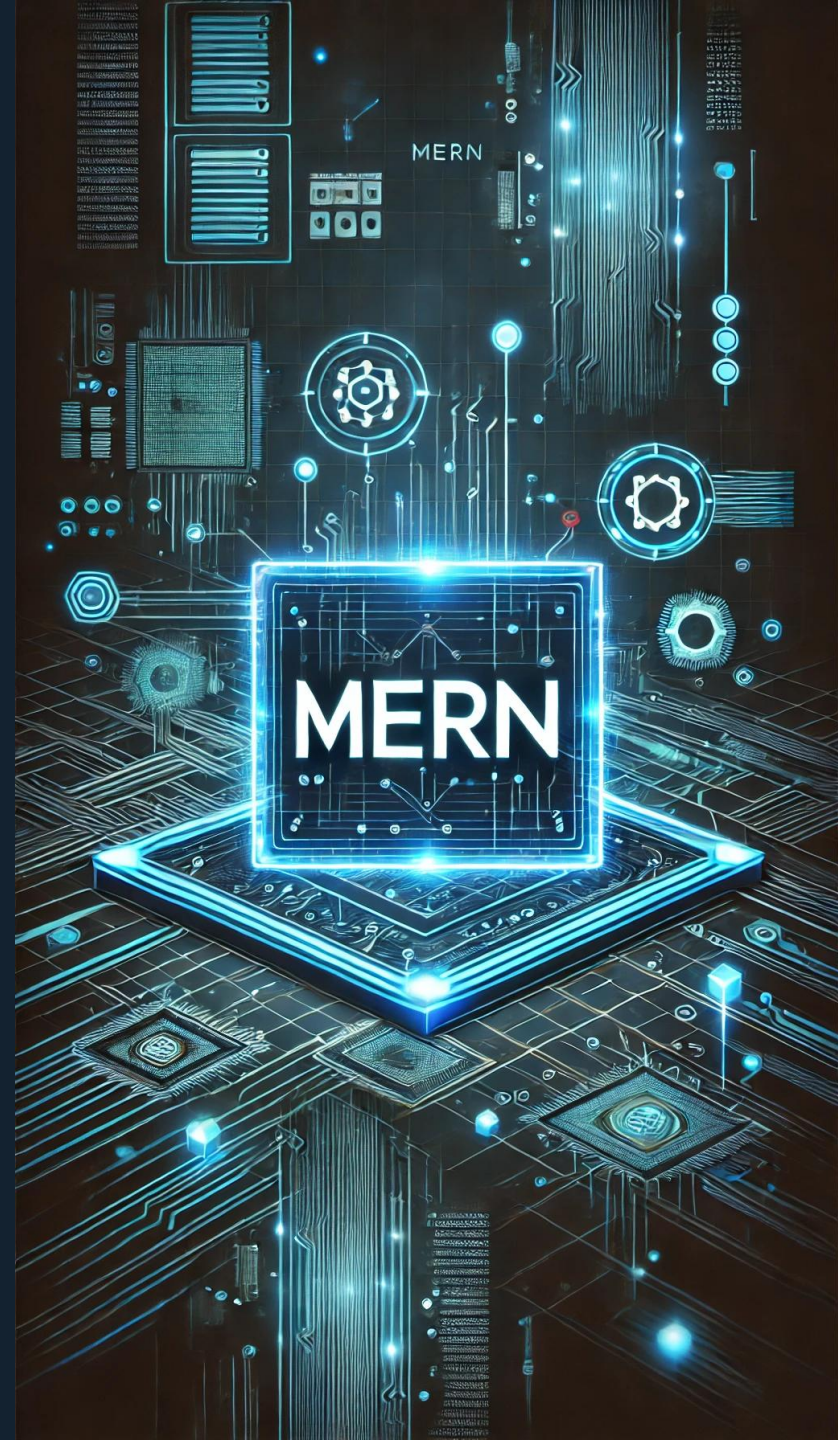
WHY DYC?

FEATURES

- **Simplified Learning**
- **Free & Open-Source**
- **AI-Powered Assistance**
- **Personalized Learning Path**
- **Smart Assessment & Certification**

TECH STACK

- **MONGO DB (ATLAS)**
- **EXPRESS.JS**
- **REACT.JS**
- **CSS**
- **NODE.JS**





MODULES



HOME PAGE



LEARNING PAGE



REGISTER PAGE



COURSE API



LOGIN PAGE



THE CHATBOT



USER DASHBOARD



FINAL ASSESSMENT



INITIAL ASSESSMENT



CERTIFICATION

Profile

First Name : DHARUN SAM

Username : dyc@gmail.com

Course : JAVA

0% completed

Introduction to Java

1. What is Java?

Java is a high-level, object-oriented programming language developed by Sun Microsystems in 1995. It is platform-independent, meaning "write once, run anywhere" (WORA). Java's syntax is similar to C++ but simpler, making it easier to learn. It is widely used in web, mobile, and enterprise application development. Java programs run on the Java Virtual Machine (JVM), ensuring cross-platform compatibility. Popular for its robustness,



LEARNING PAGE

- **User Information**
- **Courses Information**
- **Progress Tracking**
- **Course Content**
- **Buttons to Navigate**



THE COURSE API

- **Array of Objects [JSON]**
- **Id, Module, Title & Content**

```

[
  {
    "id": 1,
    "module": "Introduction to Java",
    "title": "What is Java?",
    "content": "Java is a high-level, object-oriented programming language developed by Sun Microsystems in 1995. \n It is platform-independent, meaning \"write once, run anywhere\" (WORA).\n Java's syntax is similar to C++ but simpler, making it easier to learn.\n It is widely used in web, mobile, and enterprise application development.\n Java programs run on the Java Virtual Machine (JVM), ensuring cross-platform compatibility.\n Popular for its robustness, Java includes strong memory management features.\n Java supports multithreading, allowing simultaneous execution of multiple tasks.\n It is backed by a large community and extensive libraries.\n Companies like Amazon, Google, and Netflix rely on Java for scalability.\n Learning Java opens doors to diverse software development opportunities."
  },
  {
    "id": 2,
    "module": "Introduction to Java",
    "title": "Installing Java",
    "content": "To install Java, download the latest JDK (Java Development Kit) from Oracle's official website.\n Follow the installation wizard for your OS and set up the JAVA_HOME environment variable.\n Verify the installation by running \"java -version\" in your terminal.\n An IDE like IntelliJ IDEA, Eclipse, or NetBeans can streamline Java development.\n Ensure you also install the Java Runtime Environment (JRE) for running Java applications.\n The JDK includes essential tools like javac (compiler) and java (runtime).\n Platform-specific installation steps are well-documented in Java's official resources.\n Keeping your Java version up-to-date ensures access to the latest features.\n Learning the setup process is a foundational step in mastering Java.\n Once installed, you are ready to create and execute your first Java program."
  },
  {
    "id": 3,

```



THE COURSE API

- **Array of Objects [JSON]**
- **Id, Module, Title & Content**
- **Hosted in Railways via Github**
- **Easy to update**

The screenshot shows the Railway app interface. At the top, the user is logged in as 'fearless-purpose' and the environment is set to 'production'. The navigation bar includes links for 'Architecture', 'Observability', 'Logs', and 'Settings'. The main header shows the project name 'courseapi' with a close button. Below this, there are tabs for 'Deployments', 'Variables', 'Metrics', and 'Settings'. The 'Deployments' tab is active, showing a deployment for 'courseapi-production-d73d.up.railway.app' in the 'US West' region with '1 Replica'. The deployment status is 'ACTIVE'. A button 'Add files via upload' is visible, along with a note '4 weeks ago via GitHub'. A green checkmark and the text 'Deployment successful' are shown at the bottom of the deployment card. A 'HISTORY' link is also present.

THE CHATBOT

- Built on Zapier (Chat GPT)
- Doubt Clarification
- Interactive
- In depth understanding




DYC

Hello! 😊 I'm here to assist you with your learning journey on Decode Your Course.

To get started, could you please tell me which topic or programming language you are currently interested in? This way, I can provide you with the most relevant information and resources! 🌟

Ask me anything



Built on  zapier

Profile

First Name : DHARUN SAM

Username : dyc@gmail.com

Course

100% completed

Course Completed

28. Congradulations

Congratulations! You have successfully completed the Advanced Java course. You now possess a comprehensive understanding of advanced Java techniques. Your skills span enterprise application development, server-side programming, and the use of robust frameworks. You are prepared to tackle complex, real-world programming challenges using Java. Continue to practice and apply these concepts to deepen your expertise. Explore further topics such as microservices, cloud deployment, and API development. Join Java communities to stay updated on industry trends and best practices. Keep experimenting with new libraries and frameworks to enhance your projects. Remember that continuous learning is key to long-term success. We wish you the best in your journey as an advanced Java developer.

Back

Next

Take Final Assessment



FINAL ASSESSMENT

- **After Completing 100%**

Final Assessment Rules & Regulations

Category	Details
Assessment Format	20 Multiple-choice questions (MCQs)
Time Limit	<ul style="list-style-type: none">- The test must be completed within the allocated time (20 mins).- If time exceeds, the test will be automatically submitted.
Passing Criteria	<ul style="list-style-type: none">- Below 50% → Retake the course and reattempt.- 50% - 79% → Certificate awarded.- 80% & above → Certificate + Interview Questions.
Cheating & Plagiarism	Copying answers, using external help, or cheating results should be avoided.
Retake Policy	If failed, the user must restart and complete the course before reattempting.
Certificate Issuance	Digital certificate auto-generated upon passing the test.

☒ I have read the details properly and I am ready to take the final assessment.

Start



FINAL ASSESSMENT

- **After Completing 100%**
- **Rules and Regulations**

Final Assessment

17:54

1. What is Java?

- ☒ A programming language
- ☐ An operating system
- ☐ A database
- ☐ A web browser

2. Which data type is used to create a variable that should store text?

- ☐ int
- ☐ float
- ☒ String
- ☐ char



FINAL ASSESSMENT

- **After Completing 100%**
- **Rules and Regulations**
- **Time Limit (20 minutes)**
- **20 MCQs**

Total Correct Answers:
20

[Download Certificate](#)



FINAL ASSESSMENT

- **After Completing 100%**
- **Rules and Regulations**
- **Time Limit (20 minutes)**
- **20 MCQs**
- **Immediate Result Calculation**



CERTIFICATE PAGE

- **Bonus Gift ($\geq 80\%$)**
- **Technical Interview Questions**

**Congratulations on
achieving over 80% marks!
Click the button below to
claim your exclusive bonus**

Download



CERTIFICATE PAGE

- **Bonus Gift ($\geq 80\%$)**
- **Technical Interview Questions**
- **Certificate Preview**
- **Button to Download(PDF)**



**Download
Certificate**



CERTIFICATE PAGE

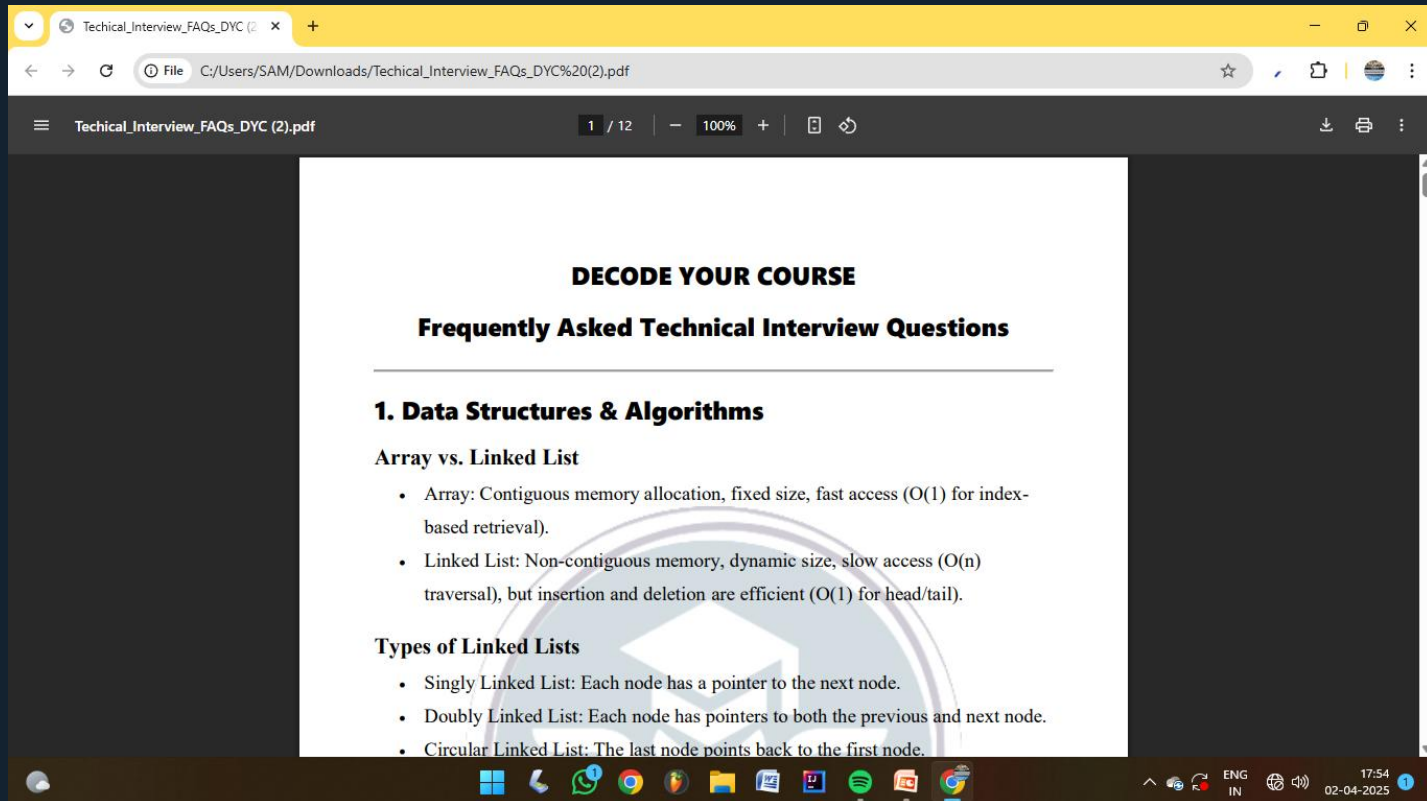
Certificate has been downloaded as PDF





CERTIFICATE PAGE

Bonus PDF has been downloaded





THE DATABASE

Stored in MongoDB Atlas and
monitored using MongoDB Compass

MongoDB Compass - cluster0.v6b6a.mongodb.net/infodb.users

Connections Edit View Collection Help

Compass

My Queries

CONNECTIONS (18)

Search connections

- cluster0.1atgh.mongodb.net
- cluster0.olqqi.mongodb.net
- cluster0.olqqi.mongodb.net
- cluster0.qnlm1.mongodb.net
- cluster0.v6b6a.mongodb.net
 - LearningPlatform
 - admin
 - config
 - infodb
 - users
 - local
 - mvc
 - netflix
 - test
 - vicky
- DecodeYourCourse
- localhost:27017

cluster0.v6b6a.mongodb.net > infodb > users

Documents (260) Aggregations Schema Indexes (1) Validation

Type a query: { field: 'value' } or [Generate query](#)

Explain Reset Find </> Options

ADD DATA EXPORT DATA UPDATE DELETE

50 251 - 260 of 260

```
{
  "_id": ObjectId('67dd58f90b48cd09b2d51732'),
  "firstname": "DHARUN",
  "lastname": "SAM",
  "username": "dyc@gmail.com",
  "password": "$2a$10$ZCLNB946VZYRB/3mLUmUqeKUKSTjnNVuia/gzNM3I.zY7JKNQtM/C",
  "initial": 17,
  "state": 33,
  "java": 1,
  "javaprogress": 29,
  "python": 0,
  "pythonprogress": 33,
  "js": 33,
  "jsprogress": 35,
  "html": 11,
  "htmlprogress": 18,
  "css": 0,
  "cssprogress": 1,
  "willing": 1,
  "completedcourses": Array (2),
  "selectedcourses": Array (4),
  "__v": 28,
  "course": "JS"
}
```



Hosting our DYC project on GitHub allows us for seamless maintenance and efficient version control.

888SAM-B / Frontend

Q Type to search

Frontend Public Pin Unwatch 1 Fork 0 Starred 1

ui 4 Branches 0 Tags

Go to file Add file Code

About

No description, website, or topics provided.

Readme Activity 1 star 1 watching 0 forks

Releases

No releases published [Create a new release](#)

Packages

No packages published [Publish your first package](#)

dharun-2004 CSS 89377b1 · yesterday 48 Commits

public	bgchange	2 weeks ago
src	css	yesterday
.env	env	last week
.gitignore	my first commit	2 weeks ago
README.md	ui	2 months ago
eslint.config.js	ui	2 months ago
index.html	Design	3 weeks ago
package-lock.json	env	last week



TESTING

API testing Using Postman

Home

Workspaces

Explore

Search Postman

Sign In

Create Account

You are using the Lightweight API Client, sign in or create an account to work with collections, environments and unlock all free features in Postman.

History

New

Import

GET https://testapidyc.up.railway.app/python

GET https://api-1-ycbp.onrender.com/python

+

...

Today

GET https://testapidyc.up.railway.app/python

GET https://api-1-ycbp.onrender.com/python

Yesterday

GET https://testapi-t2fc.onrender.com/python

GET https://api-1-ycbp.onrender.com/python

GET https://testapidyc.up.railway.app/python

GET https://testapidyc.up.railway.app/python

GET https://testapidyc.up.railway.app/python

POST https://testapidyc.up.railway.app/python

GET https://testapidyc.up.railway.app/python

GET https://testapidyc.up.railway.app/python

December 16

GET https://api-1-ycbp.onrender.com/python

December 14

GET https://api-1-ycbp.onrender.com/python

POST 127.0.0.1:3000/python

POST https://api-1-ycbp.onrender.com/python

POST http://localhost:3000/courses

https://api-1-ycbp.onrender.com/python

Save

</>

GET

https://api-1-ycbp.onrender.com/python

Send

Params

Authorization

Headers (6)

Body

Pre-request Script

Tests

Settings

Cookies

Query Params

Key

Value

Bulk Edit

Body

Cookies

Headers (14)

Test Results

Status: 200 OK

Time: 40.24 s

Size: 6.24 KB

Save Response

Pretty

Raw

Preview

Visualize

JSON

1

2

3

4

5

6

7

{

"id": 1,

"module": "Introduction to Python",

"title": "What is Python?",

"content": "Python is a high-level, interpreted programming language known for its simplicity and versatility. It was created by Guido van Rossum and first released in 1991. Python's design philosophy emphasizes code readability. It supports multiple programming paradigms, including procedural, object-oriented, and functional programming. Python's syntax is clean and easy to understand. Its dynamic typing and automatic memory management make it a popular choice for developers. The Python Package Index (PyPI) hosts thousands of third-party libraries. Python is widely used in web development, data analysis, artificial intelligence, and automation. Many major companies, including Google and Netflix, use Python in production environments. Python's active community and extensive documentation make it easy to learn and use."

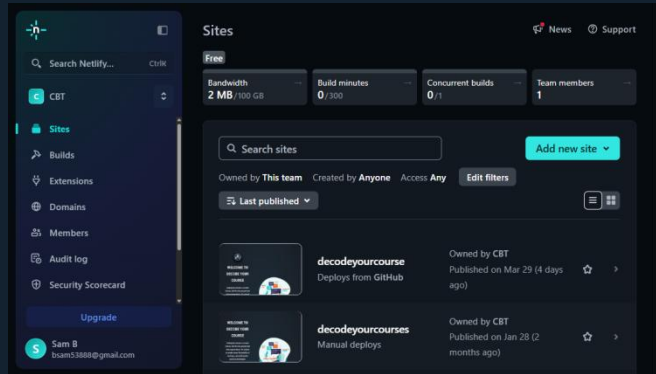
}

Console

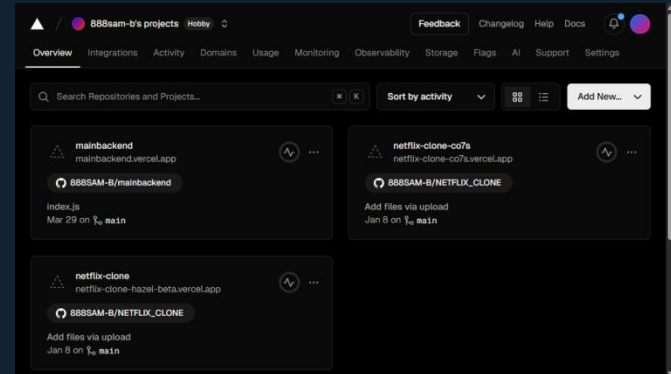
Not connected to a Postman account



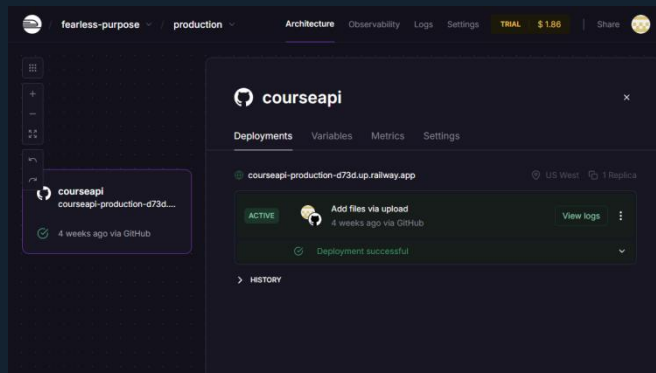
DEPLOYMENT AND HOSTING



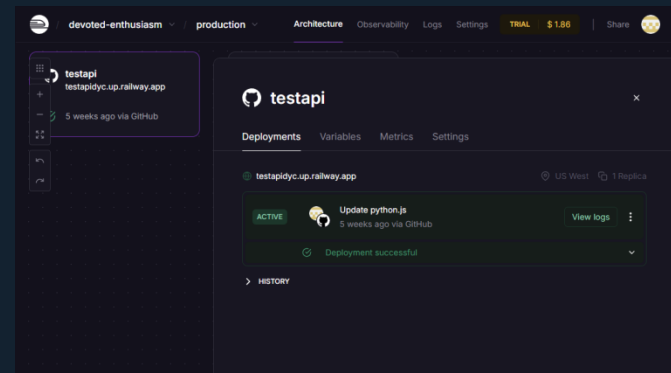
FRONTEND - NETLIFY



BACKEND- VERCEL



Course content - Railways



Assessment content - Railways



WEBSITE URL

decodeyourcourse.netlify.app



CONCLUSION



Efficient Learning



AI Integration



User-Friendly



Simplicity



Future Scope



**LOOKING FORWARD
TO YOUR FEEDBACK
AND QUESTIONS**



THANK YOU