



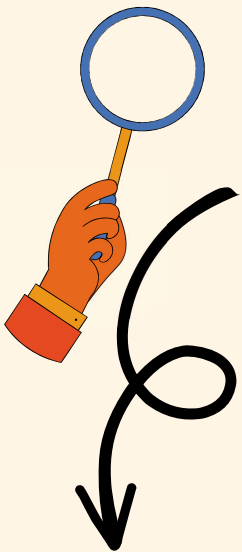
**CODTECH**

# INTERNSHIP





# TASKS



## MACHINE LEARNING



**NOTE:**

-  **MUST ATTEMPT FOUR OUT OF FOUR TASKS**
-  **SUBMIT BEFORE DEADLINE**
-  **USE INTERNET RESOURCES**
-  **FOLLOW GROUP UPDATES**

COMPLETION CERTIFICATE WILL BE  
ISSUED ON YOUR INTERNSHIP  
END DATE .

**CODTECH**



# CODTECH

# INTERNSHIP



# TASK -1



## DECISION TREE IMPLEMENTATION



### INSTRUCTIONS:

-  **BUILD AND VISUALIZE A DECISION TREE MODEL USING SCIKIT-LEARN TO CLASSIFY OR PREDICT OUTCOMES ON A CHOSEN DATASET.**
-  **DELIVERABLE: A NOTEBOOK WITH MODEL VISUALIZATION AND ANALYSIS.**

COMPLETION CERTIFICATE WILL BE  
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END DATE .

# CODTECH



**CODTECH**

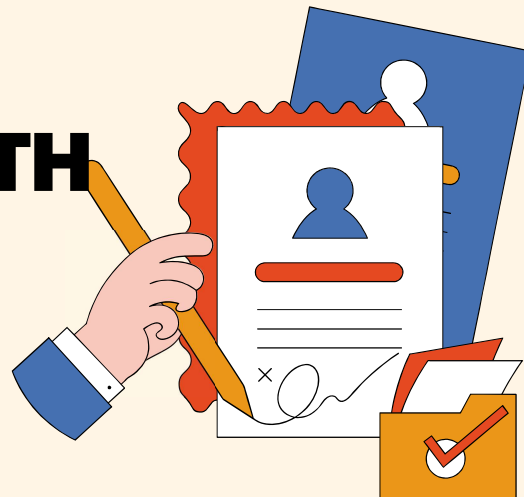
# INTERNSHIP

# TASK -2



## SENTIMENT ANALYSIS WITH NLP

### INSTRUCTIONS:



- **PERFORM SENTIMENT ANALYSIS ON A DATASET OF CUSTOMER REVIEWS USING TF-IDF VECTORIZATION AND LOGISTIC REGRESSION.**
- **DELIVERABLE: A JUPYTER NOTEBOOK SHOWCASING PREPROCESSING, MODELING, AND SENTIMENT EVALUATION**

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**CODTECH**



**CODTECH**

# INTERNSHIP

# TASK -3



## IMAGE CLASSIFICATION MODEL



### INSTRUCTIONS:

- BUILD A CONVOLUTIONAL NEURAL NETWORK (CNN) FOR IMAGE CLASSIFICATION USING TENSORFLOW OR PYTORCH.**
- DELIVERABLE: A FUNCTIONAL MODEL WITH PERFORMANCE EVALUATION ON A TEST DATASET.**

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**CODTECH**



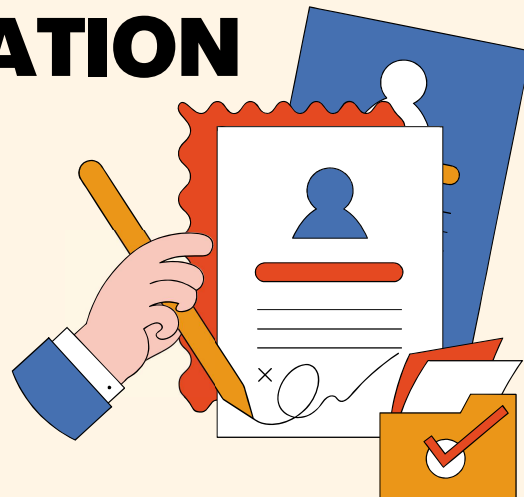
# CODTECH

# INTERNSHIP

# TASK -4



## RECOMMENDATION SYSTEM



### INSTRUCTIONS:

**BUILD A RECOMMENDATION SYSTEM  
USING COLLABORATIVE FILTERING  
OR MATRIX FACTORIZATION  
TECHNIQUES.**

**DELIVERABLE: A NOTEBOOK OR APP  
SHOWCASING RECOMMENDATION  
RESULTS AND EVALUATION METRICS.**

**COMPLETION CERTIFICATE WILL BE  
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END DATE .**

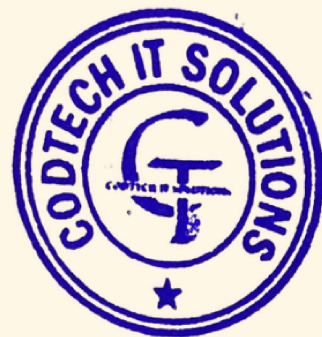
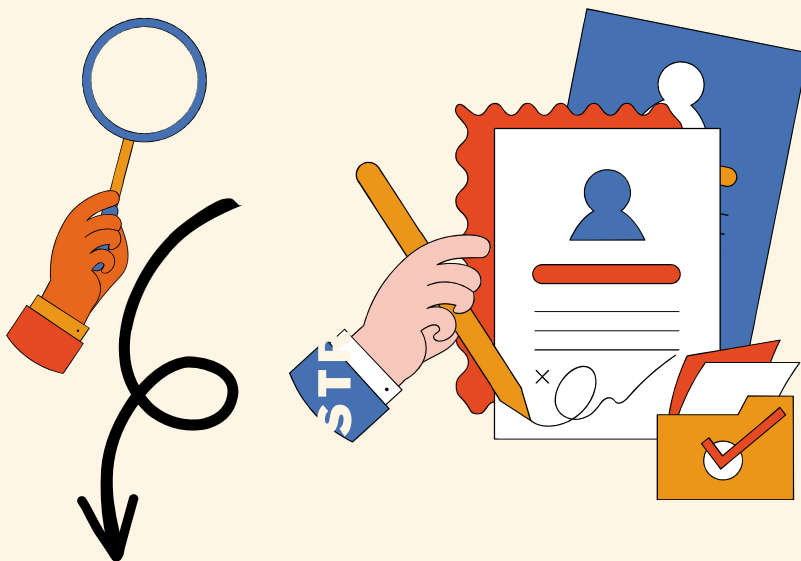
# CODTECH



# CODTECH

## INSTRUCTIONS

- **STORE ALL YOUR WORK-RELATED CODE AND FILES IN A GITHUB REPOSITORY.**
- **MAINTAIN PROPER COMMENTING IN YOUR CODE FOR BETTER UNDERSTANDING AND READABILITY.**
- **USE RESOURCES LIKE YOUTUBE, GOOGLE, AND CHATGPT TO HELP YOU COMPLETE TASKS EFFICIENTLY.**
- **FOLLOW THE VIDEO GUIDANCE PROVIDED IN WHATSAPP WHILE SUBMITTING YOUR TASKS.**
- **COMPLETE ALL FOUR TASKS AND SUBMIT THEM WITHIN THE DEADLINE WHILE WORKING AT YOUR CONVENIENCE.**



**COMPLETION CERTIFICATE WILL BE  
ISSUED ON YOUR INTERNSHIP  
END DATE .**

# CODTECH