

Model Development Phase Template

Date	16 July 2024
Team ID	
Project Title	CodeXchange – An AI Powered Code Translator Tool using Palm's chat-bison-001
Maximum Marks	4 Marks

Initial Model Training Code, Model Validation and Evaluation Report

The initial model training code will be showcased in the future through a screenshot. The model validation and evaluation report will include classification reports, accuracy, and confusion matrices for multiple models, presented through respective screenshots.

Initial Model Training Code:

```
app.py > explain_code
1 import streamlit as st
2 import google.generativeai as palm
3
4 # Configuring API key
5 palm.configure(api_key="AIzaSyA1Yg1izZU38pyHf40eOa8zWX164ZXbdPE")
6
7 # Defining Model of use
8 model_name= "models/chat-bison-001"
```

```
# Function to translate code
def translate_code(code_snippet, target_language):
    prompt = f"Translate the following code to {target_language}:\n\n{code_snippet}"
    response = palm.chat(
        model = model_name,
        messages = [prompt]
    )
    return response.candidates[0]["content"]
```

```
# Function to explain code
def explain_code(code_snippet):
    prompt = f"Explain the following code:\n\n{code_snippet}"
    response = palm.chat(
        model = model_name,
        messages = [prompt]
    )
    return response.candidates[0]["content"]
```

