

# VBA Code Analyzer

## Overview

The VBA Code Analyzer is a Python-based project that analyzes VBA functions from a .bas file which is extracted from excel files uploaded by the user. It provides human-readable explanations of the functions. The project uses the **Hugging Face transformers library** and **SpaCy** for natural language processing and text summarization.

## Prerequisites

Before running the VBA Code Analyzer, ensure you have the following prerequisites:

- Python 3.6 or higher
- Hugging Face transformers library
- SpaCy
- TensorFlow
- SentencePiece

## Installation

Follow these steps to set up the environment and install the necessary libraries:

1. Clone the Repository:

```
bash
git clone https://github.com/Yohasini-U-BA/VBA-Macros
```

2. Create a Virtual Environment (optional but recommended):

```
bash
python -m venv venv
source venv/bin/activate On Windows: venv\Scripts\activate
```

3. Install Required Libraries:

```
bash
pip install spacy tensorflow transformers sentencepiece
```

4. Download SpaCy Model:

```
bash
python -m spacy download en_core_web_sm
```

## Usage

1. Extract VBA Code from Excel file:
2. Analyze the VBA functions and generate explanations.
3. Run the script:

```
python app.py
```

4. Check the Output:

The explanations will be written to documentation.txt in the project directory.