### **Security Hacker Tool - Documentation**

This document provides a detailed overview of the Security Hacker Tool developed using Python Flask. It includes the application code, technical documentation, and a flowchart explanation.

### **Application Code**

#### Flask Application Code (app.py)

```
from flask import Flask, request, render_template, redirect, url_for, jsonify
import os
import hashlib
import subprocess
import shutil
import magic

app = Flask(__name__)

UPLOAD_FOLDER = 'uploads'

TOOLS_FOLDER = 'tools'

EXTRACTED_FOLDER = 'extracted'

os.makedirs(UPLOAD_FOLDER, exist_ok=True)
```

```
@app.route('/')
def index():
    frameworks = ['Cocos', 'Flutter', 'React Native', 'Cordova', 'Unity']
       actions = ['reflutter app', 'flutter dart objects dump', 'libil2cpp dumper', 'dump using Hermes
decompiler', 'cocos file dumper']
   return render_template('index.html', frameworks=frameworks, actions=actions)
@app.route('/process', methods=['POST'])
def process_file():
   try:
        # Step 1: File Upload and Framework Selection
        file = request.files['file']
        framework = request.form['framework']
        action = request.form['action']
        ip_address = request.form.get('ip_address', '')
        # Step 2: File Validation
        file_signature = magic.Magic(mime=True)
        file_type = file_signature.from_buffer(file.read(2048))
        file.seek(0)
        if not file.filename.endswith('.apk') or file_type != 'application/vnd.android.package-archive':
           return jsonify({'error': 'Invalid file format. Only APK files are allowed.'}), 400
        # Create a unique folder using SHA256 hash
        file_hash = hashlib.sha256(file.filename.encode()).hexdigest()
```

```
extracted_path = os.path.join(EXTRACTED_FOLDER, file_hash)
os.makedirs(extracted_path, exist_ok=True)

# Save the file to the upload folder

file_path = os.path.join(UPLOAD_FOLDER, file.filename)

file.save(file_path)

# Step 3: APK Extraction

apk
```

#### **Technical Documentation**

- 1. App Structure:
  - app.py: Main application logic.
  - templates/: HTML templates folder.
    - index.html: Main UI for file upload and selection.
    - success.html: Output page after action execution.
  - uploads/: Stores uploaded APK/Zip files.
  - extracted/: Stores APK extracted files.
  - tools/: Contains all required tools.
- 2. Key Features:
  - File validation using MIME types.
  - Extraction using apktool.
  - Actions executed based on user selection and file content.

- Error handling with descriptive error messages.
3. Dependencies:
- Flask
- Python 3
- apktool
- python-magic library for MIME type detection.
4. Flowchart Explanation:
- Input Section: Upload APK and dropdown selections.
- Processing Section:
- Validate file type.
- Extract APK with apktool.
- Execute selected action.
- Output Section: Display logs and paths.
++
User Upload File
++
I
v
++
Validate File
(Signature Check)

++
I
V
++
Extract File Using APK
Create SHA256 Folder
++
I
v
++
Execute Selected Action
Based on Dropdown Input
++
v
++
Show Results
++