**INTEGRATION DOCUMENTATION FOR ANDROID SOCKET.IO**

**INTRODUCTION:**

The sample project was built using the socket.io client-side real-time messaging polling library. The underlying technology uses WebSocket technology to connect open an active connection to the server to send and listening to messages.

**CORE GRADLE DEPENDENCIES:**

The following are the core third party dependencies library that was used for the sample project in order to ease the use of integration to the action AfroCamGist App:

1. Socket IO – Client: This is an official open-source library by Socket.io team to listen to message coming from the server and broadcast message from the Mobile App. The following is the gradle dependency implementation:

implementation (‘io.socket:socket.io-client:2.0.0’) {

exclude group: ‘org.json’, module : ‘json’

}

1. Local Broadcast Manager: This is an Android official library to broadcast data across the App:

implementation (‘androidx.localbroadcastmanager:localbroadcastmanager:1.0.0’)

**DESIGN PATTERN:**

1. WebSocketService: This is Android Service that handles the broadcast and listening of the entire message on the App, it always run as a background service. The service has also handle the state of a network connection and help to reconnect socket.io to the server whenever the User is offline and online.
2. BaseSocketActivity: This activity implements the conventional AppCompactActivity, where other activity that needs the implementation of Socket.io will inherits from. Basically, holds the business logic of the WebSocketService Background Service and exposes Broadcast at when due.