



HORMUUD USSD API DEVELOPER'S GUIDE

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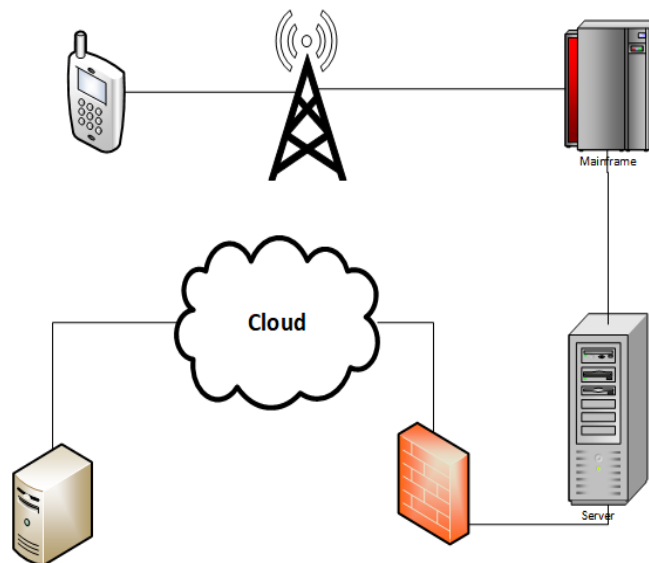
1. INTRODUCTION TO USSD:

1.1. What is a USSD?

Unstructured Supplementary Service Data or USSD in short is a GSM service that makes possible for mobile phone subscribers to deal with a remote application from their SIM Cards in a real time. A USSD session is initiated once a subscriber dials a USSD code to ease the transmission of data among your application and the client over a signaling channel. It is a highly scalable service as it does not require an internet connection and is supported by all cellphones.

1.2. Hormuud USSD API

We provide a simple http rest api for USSD that is easy to make integration with your application as the below diagram shows the structure of the USSD system from cellphone which is the originator of the USSD to client's endpoint server.



2. USSD API Requirements

2.1. Short Code Requirement

A USSD short code is required in order to dial it by clients and it is created from our end.

2.2. Endpoint Requirement

1. Endpoint to handle ussd request and response from clients.
2. Another endpoint to receive notifications during ussd session

Requirement	Description
Endpoint URL	The url to push the ussd request
Method	POST
Data Format	JSON
Content type	Application/json

3. Receiving USSD Request

3.1. USSD JSON Request Format From Hormuud

```
{
  "token":"xxxxxx",
  "requestid":"cdd9094b-a0c9-4da5-9b68-de780cd66758",
  "sessionid":"37884",
  "origin ":"615510162",
  "ussdcontent":"*000#",
  "ussdstate":"begin",
  "shortcode":"000",
  " issuedon ":"7/6/2020 10:12:29 AM"
}
```

3.2. Request Parameters Details

Parameter	Details
token	Is used to identify and filter the source of the ussd request.
requestid	Is used to identify each request with in the same ussd session.
sessionid	Is the ussd session id.
origin	The phone number initiated the ussd request.
ussdcontent	The ussd Message which is the input from clients.
ussdstate	The state of the ussd from begin, continue and end.
shortcode	The ussd code that a client can dial such as *000#
issuedon	The date time of the ussd request is received on.

Note:

The above parameter names are not mandatory, you can have your own custom parameter names as per your requirement.

4. Sending USSD Response

4.1. USSD JSON Response Format from Endpoints

```
{
  "sessionid":"37884",
  "shortcode":"000",
  "origin":"615510162",
  "ussdcontent":"1. Open 2. Close",
  "endreply":"false"
}
```

4.2. Response Parameters Detail

Parameter	Details
sessionid	Is the ussd session id.
shortcode	The ussd code that a client can dial such as *000#
origin	The phone number initiated the ussd request.
ussdcontent	The ussd Message which is the output to the clients.
endreply	The Boolean value, True and False, that decides the ussd session to continue or end