```
1    FYKO Java Client.
2
3    Step 1: Generate RSA Keypair
4
5    Step 2: Build payload to get ann from server.
6    Payload for getting
     ann:{"rsa_public_key_2048_base64":"MIIBIjANBgkqhkiG9w0BAQEFAAOCAQ8AMIIBCgKCAQEA3hL6iYfj/x
     tmhs5T2Ua5SXpmrw2faZJKPZAFhFk3f2aDAkWotVYuLYhRd/Rs7hlN68fkFiCLxbVMNEa3OtLZ7l6ggggygbNLn+6
     GZ5UoqhgHokVp8GyCcpBe8DBqvZ7uxclqxgdup9Rc18ZHGkN4hxN3Wsu2TXFOycCmOCA4w/fwv10mavUTkSlNfR3f
     gFVc/OvO3x1th5cdewOneH6SGuO2O9nIVdZ7Vu46c16//KlAz4WgGk384Y9r1EbUMsEdXhf/BMQGW9PfNQnctfk3V
     cj5RCEUITNgzvlDYIxHYeJfyxE0sfAvbt7p40k5hiyt6iWZNP2o+krMPz1yCOOlAwIDAQAB","format":"h5"}
7
8    Step 3: Send payload to server.
9
10   Step 4: Parse the payload obtained from the server containing the encrypted ann model
11   annId=simple_model_h5_1683982891.5879002.h5.encrypted
12
13   Step 5: Decryting AES Key used to encrypt the model.
14
15   Step 6: Decryting ANN Model using the AES Key
16
17   Step 7: Save the model to file:simple_model_h5_1683982891.5879002.h5.encrypted
18
19   Step 8: Load the model with name:simple_model_h5_1683982891.5879002.h5.encrypted
20   SLF4J: Failed to load class "org.slf4j.impl.StaticLoggerBinder".
21   SLF4J: Defaulting to no-operation (NOP) logger implementation
22   SLF4J: See http://www.slf4j.org/codes.html#StaticLoggerBinder for further details.
23
24   Step 9: Build message payload to send to the server
25   mean=0.07584159076213837
26   UTC Time=1683982923,
     randomString=dc7a9699-be2d-45ec-9d8b-d937007467e5,aesKey=6bef21b2423fb4c086cec77a07ec73de
     bcece42982b533c26f98eb5125273a4d
27   Secret Message:message id:e40211cc-5c9d-45fb-89ce-90a8dfe7fe08
28   English: FYKO is a cool project
29   Telugu: FYKO ఒక మంచి ప్రాజెక్ట్
30   Hindi: FYKO एक अच्छा प्रोजेक्ट है
31   Portugese: FYKO é um projeto legal
32   Thai: FYKO เป็นโครงการที่ยอดเยี่ยม
33   Chinese: FYKO是一個很酷的項目
34   Japanese: FYKOはクールなプロジェクトです
35   Korean: FYKO는 멋진 프로젝트입니다
36   Irish: Is tionscadal fionnuar é FYKO
37   Arabic: FYKO مشروع رائع
38   Sending secret message to
     server:{"utc_time_seconds":1683982923,"random_string":"dc7a9699-be2d-45ec-9d8b-d937007467
     e5","encrypted_message":"BJgO2HP2VzB095ZgRJd0inhbXx69GF2XfBBWlVF+3H7MiTLENq2v/RKbW5FaeXSF
     OiZCzFmwz6v6rG4QtMWEd939vCxLJp7s5lqj/fDq3rI9Npi4uMKAdbrxHteddVPbDsJY05bXgcHN5LYz+KN/94boh
     aChQA/9pjGtkypiqC+7bN3ypgyIW17iXPJAJox35gIY+mj91friI0Qiet56/D59lvHIOxEOEq48EFmGf+NrbJNNNt
     HX5Wp+F2VhYsohzh2gZcNLTSbIGjEE6haUFEACRLaY6g/S5SYy07LWExtgeSVPovvkjMOlQrkbC2oh0NcY2Ge/qWa
     yhJBcdeyAuRskApAjIP0SpEOOtgm2ZjaYdpSfR4zAZO/2syMXrU8dEq0Y5Kf00kGHmQZbtL2ZHBIS3OHGz9lSs1fV
     HawrEoROzmgIKY5O5Ja16awmqBzx8CJ4JNj12Uaas2iGoJUxBuhWgTShVzdwwH058sbuH+y2UoV0dyACU24kA3xDp
     RUxHiKA3UQq0ffihQRgGpMMSc1nE7M3y2jP8EfslAoutLFrZJXE5WVgu0ni0C9CLIdIYjN2l8h2qrEesv3LN3tugA
     C0cpoyJpRBjBsZHjmssN5ZXuOHkBq8eFx7d/bdW1gR1hcmJKYuSYSV5WN8bVVSjq5UWDS2cY8hzyiavbDFtIkN9Mc
     fUf7QPyqVsvIK/dWFUqhiIK0YNH/cShkj5+csjgQScoqZyOz530BwSbo2jyTaTIyrZDWBHyiEfaWYr1hT6S3I6dWE
     P0mgw8LP7yFoS2fcWQZOD/entaT74lBShPZTcM7Uxnu03+MyuCeFNVEid5wfaH/a7SbHDA88Zh4cdC2A4CUalfEBJ
     b3oKSBivmLOLxoKO/GhsrLFA5D8cyb3U7SkaCwCiUsvMRjD7+ExAu5EZlvO+W/I9RqqsG9vSsbqNPPrCCv7pBLxiD
     5XLnzK+WMRCsle1eoXzCIiFKDUSw==","ann_id":"simple_model_h5_1683982891.5879002.h5.encrypted
     "}
39   Response from Server:{
40     "request_message": "message id:e40211cc-5c9d-45fb-89ce-90a8dfe7fe08\nEnglish: FYKO is
       a cool project \nTelugu: FYKO \u0c12\u0c15 \u0c2e\u0c02\u0c1a\u0c3f
       \u0c2a\u0c4d\u0c30\u0c3e\u0c1c\u0c46\u0c15\u0c4d\u0c1f\u0c4d \nHindi: FYKO
       \u090f\u0915 \u0905\u091a\u094d\u091b\u093e
       \u092a\u094d\u0930\u094b\u091c\u0947\u0915\u094d\u091f \u0939\u0948 \nPortugese: FYKO
       \u00e9 um projeto legal \nThai: FYKO
       \u0e40\u0e1b\u0e47\u0e19\u0e42\u0e04\u0e23\u0e07\u0e01\u0e32\u0e23\u0e17\u0e35\u0e48\u0
       e22\u0e2d\u0e14\u0e40\u0e22\u0e35\u0e48\u0e22\u0e21 \nChinese:
       FYKO\u662f\u4e00\u500b\u5f88\u9177\u7684\u9805\u76ee \nJapanese:
```

```
         FYKO\u306f\u30af\u30fc\u30eb\u306a\u30d7\u30ed\u30b8\u30a7\u30af\u30c8\u3067\u3059
         \nKorean: FYKO\ub294 \uba4b\uc9c4 \ud504\ub85c\uc81d\ud2b8\uc785\ub2c8\ub2e4 \nIrish:
         Is tionscadal fionnuar \u00e9 FYKO \nArabic: FYKO \u0645\u0634\u0631\u0648\u0639
         \u0631\u0627\u0626\u0639"
41    }
42
43
44    Step 10: Verify if the Server was able to decrypt the message.
45    Original Message:message id:e40211cc-5c9d-45fb-89ce-90a8dfe7fe08
46    English: FYKO is a cool project
47    Telugu: FYKO ఒక మంచి ప్రాజెక్ట్
48    Hindi: FYKO एक अच्छा प्रोजेक्ट है
49    Portugese: FYKO é um projeto legal
50    Thai: FYKO เป็นโครงการที่ยอดเยี่ยม
51    Chinese: FYKO是一個很酷的項目
52    Japanese: FYKOはクールなプロジェクトです
53    Korean: FYKO는 멋진 프로젝트입니다
54    Irish: Is tionscadal fionnuar é FYKO
55    Arabic: FYKO مشروع رائع
56    Message decoded by Server:message id:e40211cc-5c9d-45fb-89ce-90a8dfe7fe08
57    English: FYKO is a cool project
58    Telugu: FYKO ఒక మంచి ప్రాజెక్ట్
59    Hindi: FYKO एक अच्छा प्रोजेक्ट है
60    Portugese: FYKO é um projeto legal
61    Thai: FYKO เป็นโครงการที่ยอดเยี่ยม
62    Chinese: FYKO是一個很酷的項目
63    Japanese: FYKOはクールなプロジェクトです
64    Korean: FYKO는 멋진 프로젝트입니다
65    Irish: Is tionscadal fionnuar é FYKO
66    Arabic: FYKO مشروع رائع
67    Is the original secret message sent equal to the request message in response:true
68
69    Step 11: sending a stale request which is older than 10 seconds to the server
70    Response from Server:{
71      "error_message": "Stale Request: Rejecting it"
72    }
73
74
75    Step 12: sending a future request which is older than 10 seconds to the server
76    Response from Server:{
77      "error_message": "Request from the future: Rejecting it"
78    }
79
80
```