**Automating Mobile OTP Verification in Cypress 🚀**

Automating **mobile OTP verification** in Cypress requires an SMS gateway that provides an API to:

1. Receive OTP messages.
2. Extract the OTP.
3. Enter the OTP into the UI.
4. Verify the authentication flow.

**📌 Real-World Approach: Using an SMS API**

You can use **temporary phone number services** that provide API access to received SMS messages. Some popular options:

* [**Twilio**](https://www.twilio.com/) – Best for real-world OTP automation.
* [**MessageBird**](https://www.messagebird.com/) – Alternative to Twilio.
* [**TextNow**](https://www.textnow.com/) – Free, but limited.
* [**Receive-SMS API**](https://www.receivesms.co/) – Temporary numbers, useful for testing.

**🛠 Step 1: Setup Twilio API (Recommended)**

Twilio allows you to **buy a virtual number** and **receive OTPs via API**.

**Create a Twilio Account**

1. Sign up at Twilio.
2. Get a **Twilio phone number**.
3. Get API credentials from the **Twilio Console**:
   * Account SID
   * Auth Token
   * Twilio Phone Number

**Install Twilio SDK in Cypress**

npm install twilio --save-dev

**📌 Step 2: Configure Cypress with Twilio**

Modify cypress.config.js to store API keys:

module.exports = {

e2e: {

env: {

TWILIO\_ACCOUNT\_SID: "your\_account\_sid",

TWILIO\_AUTH\_TOKEN: "your\_auth\_token",

TWILIO\_PHONE\_NUMBER: "your\_twilio\_number"

}

}

};

**📌 Step 3: Create a Custom Cypress Command to Fetch OTP**

Modify cypress/support/commands.js:

import twilio from "twilio";

Cypress.Commands.add("getOtpFromSms", (toPhoneNumber) => {

const accountSid = Cypress.env("TWILIO\_ACCOUNT\_SID");

const authToken = Cypress.env("TWILIO\_AUTH\_TOKEN");

const client = twilio(accountSid, authToken);

return client.messages.list({ to: toPhoneNumber, limit: 5 }).then((messages) => {

if (!messages.length) {

throw new Error("No OTP messages received.");

}

// Extract OTP from message body (assuming it's a 6-digit code)

const otp = messages[0].body.match(/\b\d{6}\b/)[0];

cy.log(`Received OTP: ${otp}`);

return otp;

});

});

**📌 Step 4: Automate OTP Verification in Cypress**

Create a test file: cypress/e2e/mobile-otp.cy.js

describe("Automate Mobile OTP Verification", () => {

it("Should verify OTP received via SMS", () => {

const testPhoneNumber = "+1234567890"; // Replace with a real phone number

cy.visit("https://example.com/login"); // Change to real website

// Enter phone number and request OTP

cy.get("#phone-input").type(testPhoneNumber);

cy.get("#request-otp-button").click();

// Wait for OTP message

cy.getOtpFromSms(testPhoneNumber).then((otp) => {

// Enter OTP in UI

cy.get("#otp-input").type(otp);

cy.get("#verify-button").click();

// Verify successful login

cy.contains("Welcome to your dashboard").should("be.visible");

});

});

});

**📌 Alternative: Using Free Receive-SMS APIs**

If you need **temporary phone numbers** for testing, use:

* [**https://sms-activate.org/**](https://sms-activate.org/)
* [**https://www.receivesms.co/**](https://www.receivesms.co/)

**Example Using Receive-SMS API**

cy.request("https://www.receivesms.co/api/otp?phone=+1234567890").then((response) => {

const otp = response.body.otp;

cy.get("#otp-input").type(otp);

cy.get("#verify-button").click();

});

**✅ Summary: How It Works**

1. **Use Twilio** (or an alternative API) to receive OTPs.
2. **Fetch the latest SMS message** using API calls.
3. **Extract the OTP from the message body** using regex (\b\d{6}\b).
4. **Enter OTP into the web form and verify success**.