Install Chrome

You need Chrome or Chromium running on a desktop.

- **On Ubuntu**:

  ```
  apt install chromium-browser
  ```

You need Chrome running on an Android.

- Either install Chrome from APK Mirror;
- or install Chrome from the Play Store, which requires a Google account.

Option #1: Glitch

You can use **Glitch** to code a mobile game, without installing anything.

Open our you-win template, **remix** it, and start coding immediately!

Option #2: Node.js

If you prefer, you can **install** `you-win` to your computer.

1 **Install Node.js**, which includes NPM.

   On Ubuntu, run the following in a Terminal:

   ```
   curl -sL https://deb.nodesource.com/setup_8.x | sudo -E bash -
   sudo apt-get install -y nodejs
   sudo apt-get install -y build-essential
   ```

2 **Install `you-win`** globally.

Run the following in your shell (**Command Prompt** on Windows,
Terminal on macOS/Linux):

```
npm install -g you-win
```

3 **Start a new project!**

In your shell, use the `cd` command to move into your Documents folder.

```
cd Documents
```

Run the `you-win` command to make a new project:

```
you-win first.js
```

This will create a new game from the `you-win` template, which should save
you a bit of typing.

Now open the `first.js` file you just created in your favourite text editor.
Text editors include **Gedit** (Ubuntu only), **VSCode**, **Brackets**, or **Sublime
Text**.

The template should look like this:

```
import * as UW from 'you-win'
import {forever, Phone, World, Sprite, Text, Polygon, Rect, Sound} from
'you-win'

// var phone = new Phone

UW.init({
})
.then(() => {

    var world = new World
    world.title = ''
    world.background = 'white'

    // ...

})
```

To run your game:

- Open http://localhost:8000 in Chrome on your computer.
- In your Terminal, you should see a web address output to the console, eg `http://192.168.1.10:8000/`. Open that address on your Android.

Remote Debugging

ADB Driver

First, make sure you have the Android ADB driver installed.

- **On Ubuntu**:

  ```
  apt install android-tools-adb
  ```

  Make sure you're in the `plugdev` group.

  ```
  sudo usermod -aG plugdev $LOGNAME
  ```

- **On Windows:** Install the OEM driver from your manufacturer.

- **On macOS:** "It just works. Skip this step."

USB Debugging

You need an Android running 4.2 or later (e.g. a Galaxy S3 or newer).

On your Android phone:

1 In **Settings**, find **About phone**, and tap **Build number** 7 times. This should enable Developer Options.
2 Go back, and open **Developer Options**. Enable **USB Debugging**.
3 Use a micro USB cable to connect your Android to your computer. Make sure to **Allow USB Debugging** on your phone.

On your desktop:

1. In Chrome, open DevTools (`Ctrl+Shift+J`; or `⌥⌘J` on Mac). Go to **More Tools** → **Remote devices**. Make sure **Discover USB Devices** is ticked.
2. Find the `you-win` tab running on your phone, and click **Inspect**.

Now you can see a preview of your phone on the computer–but more importantly, you can see any error messages which appear!

Read Google's Remote Debugging article for more details.