Upland Hackathon Developer Guide

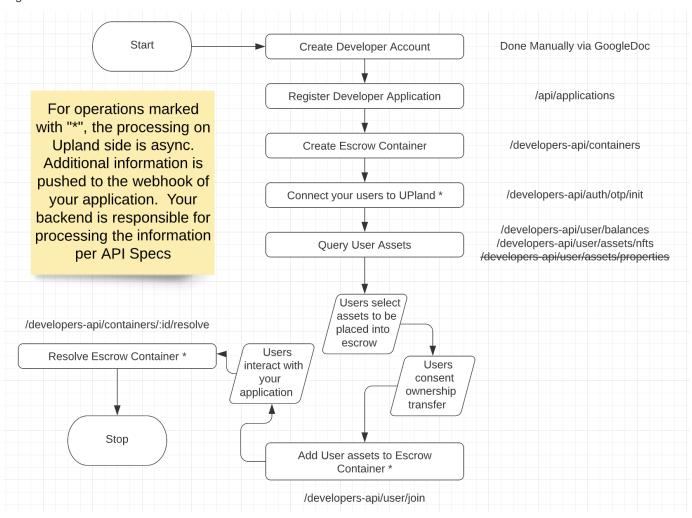
Important Resources

Click to register for the hackathon (Skip if already registered)

Sandbox Environment

API Specs

High-Level Guide -



What is provided for you

We provide a Sandbox Environment and a set of developer APIs for you to develop your application.

The **Sandbox** provides a safe environment for you to act as an end-user - after you create your account there, you can explore, buy/sell/trade assets. This not only provides an opportunity for you to get familiar with the Upland application, but you can also create the users and their assets needed for your application. A user guide is provided in the next section.

Developer API provides the following -

- User mapping maps IDs of users of your application to Upland user IDs
- Escrow Service provides the ability to create the escrow container for your application and the ability to place user assets into the escrow container, query the transaction finality and resolve the escrow container (for example, transfer assets from losers to winners, take a cut for the developer, etc.) per your instruction.
- Read-only APIs for you to run various queries.

The API specs, and a sample scenario, are provided later in this document.

Sandbox Environment

We created a sandbox environment for you to experiment in. The sandbox environment has precisely the same user interface as the production environment. You can explore, buy/sell/trade assets like in the production environment, except that the assets you acquire/use will not persist beyond the hackathon.

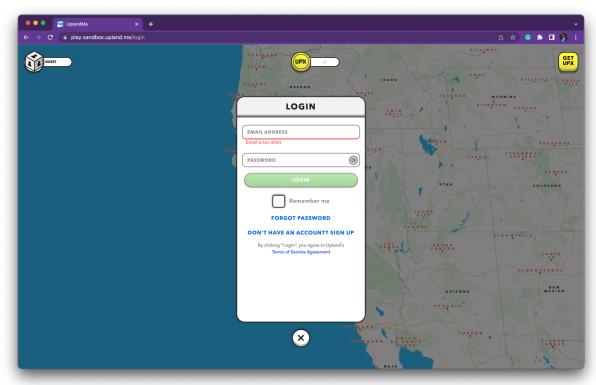
Important

- 1. You can access https://play.sandbox.upland.me/
- 2. Credentials
 - a. Username: Upland Password: TZ8n32r2DnUmVsu7
- 3. Please do NOT use your actual credit card. Here's a test credit card for you to use with the sandbox environment -
- 4. Credit Card Number: 4111 1111 1111 1111
- 5. Expiration Date: 07/27
- 6. CVV: 960
- 3. All transactions in the Sandbox environment will be taken down after the hackathon is complete.

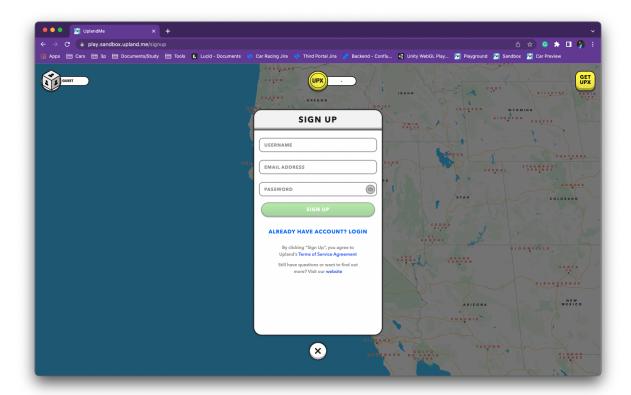
Step-by-Step Guide

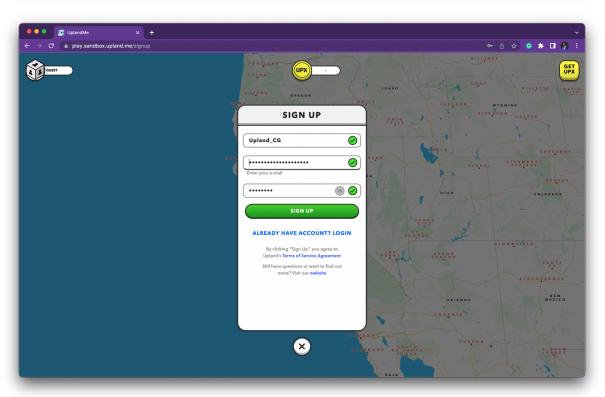
Steps to use it:

- 1. Access the Sandbox using the provided credentials.
- 2. Sign up
 - a. Click on: "Don't have an account? Sign Up"

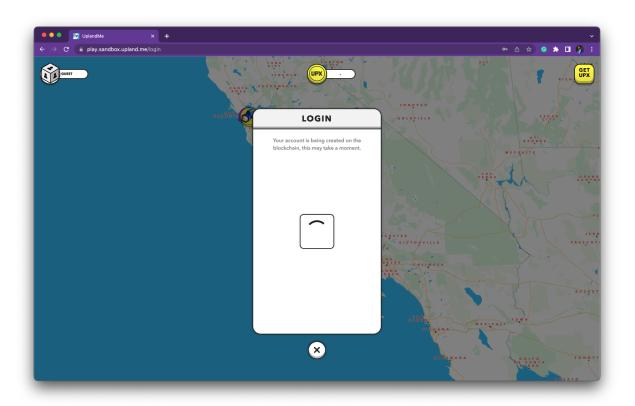


b. Provide a username, email address, and password. Remember: **Use the same email used to register yourself as a developer.**





c. Check your email for verification.





ACCOUNT VERIFICATION

Thank you for signing up for Upland, a property trading game. Please click the button below to verify your account.

VERIFY ACCOUNT

To life, liberty and property,

The Upland Team

Unsubscribe Upland Community Team





Hey upland_cg

Upland gives you the power to buy, sell, and trade digital properties based on real-world addresses. Grow your wealth by completing collections, participating in events, and trading with other Uplanders. In Upland, you don't just play for fun, you play to earn!

It's time to start building your empire. The metaverse awaits...

LOG IN TO PLAY

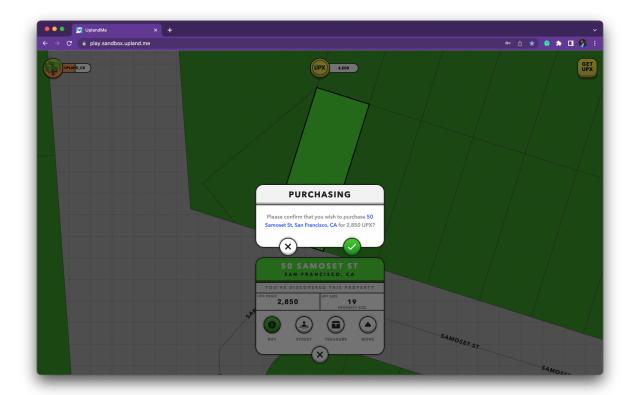
Thanks for joining our awesome community of digital property pioneers!

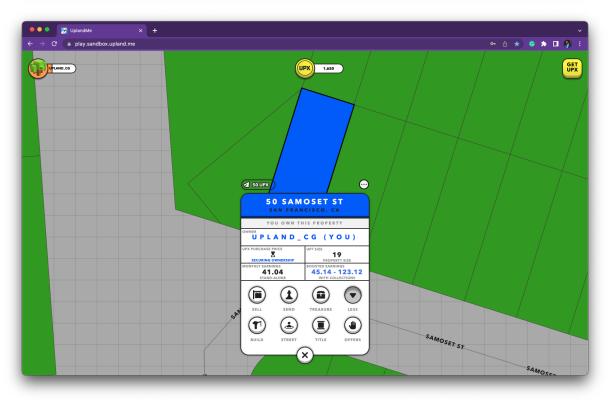
To life, liberty and your new property,

The Upland Team

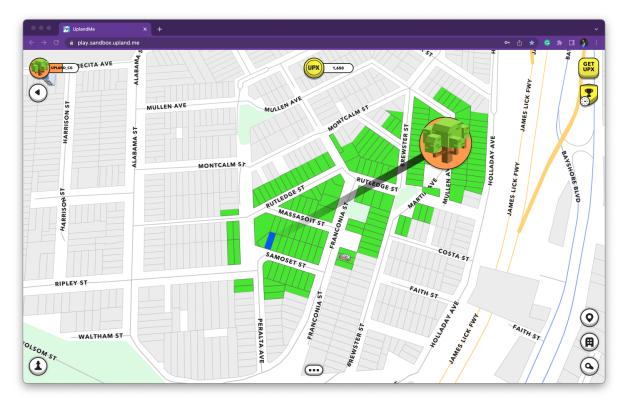
<u>Unsubscribe</u>
Upland Community Team

- d. Select block explore and city.
 - i. This hackathon will be available in four cities:
 - 1. San Francisco
 - 2. Fresno
 - 3. Manhattan
 - Brooklyn
- e. Purchase a property

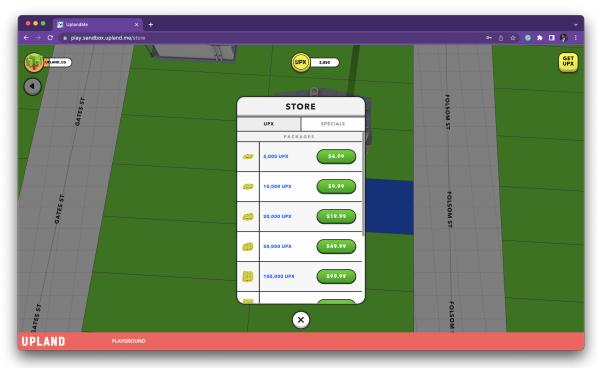


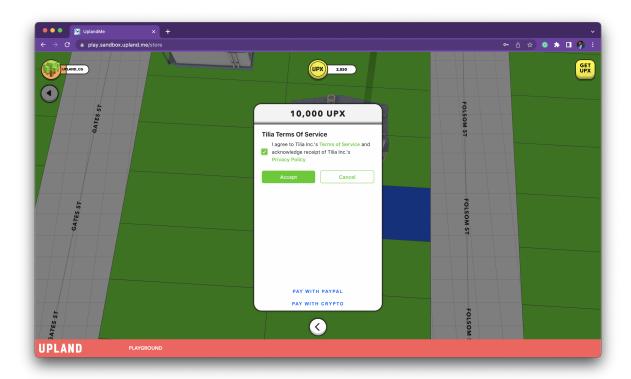


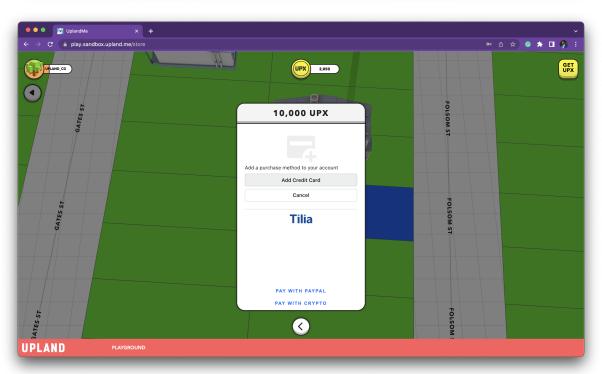
- 3. Buy UPXs to level up and receive SPARKS and an NFT Box with the following assets:
 - a. One Block Explorer
 - b. One Structure Ornamentc. One Spirit Legit
- 4. Let's to the process of buying UPX:
 - a. Click the "GET UPX" button



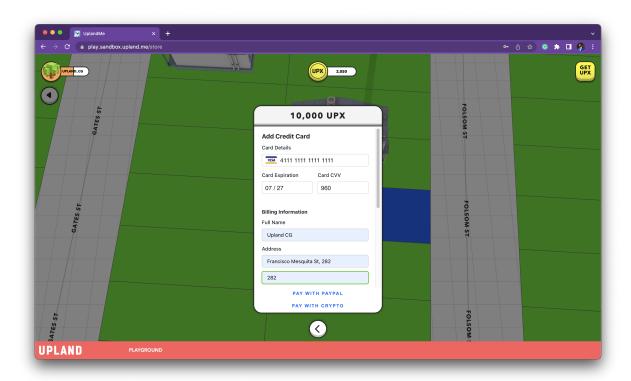
b. Select pack (Remember to use the test credit card provided above)

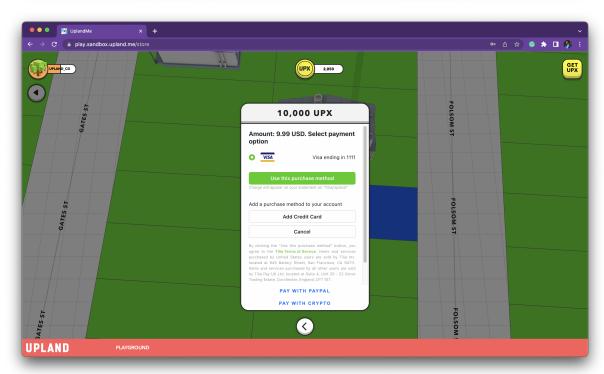


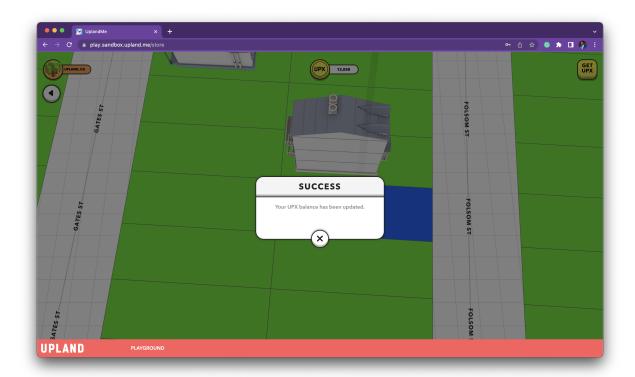




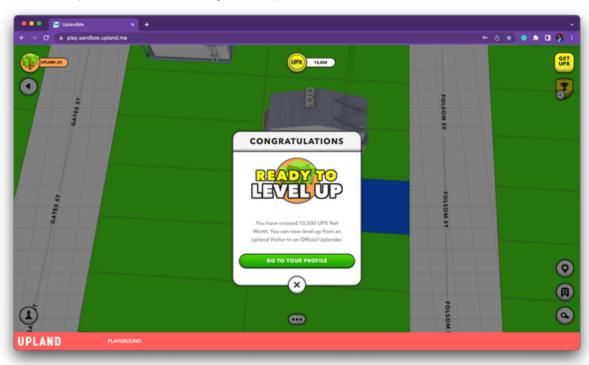
c. Fill up the credit card with the information provided above; again, please DO NOT use an actual credit card. The address can be anything you choose.

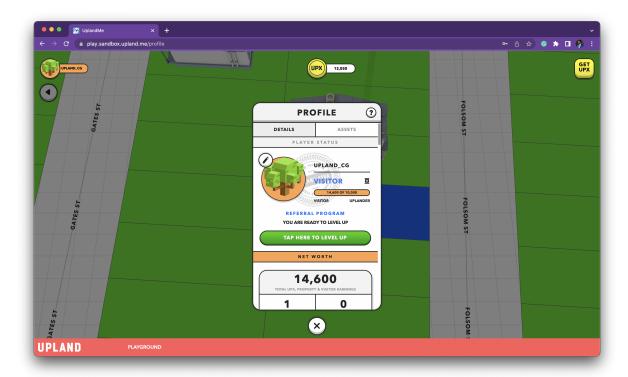




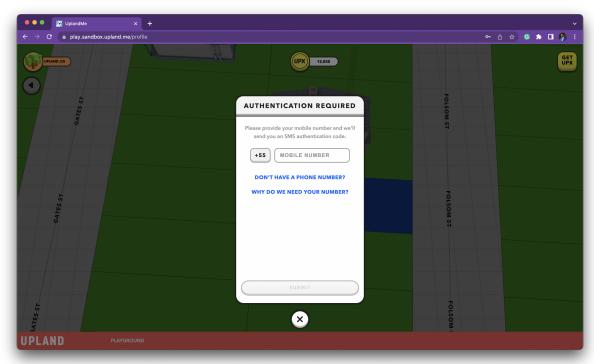


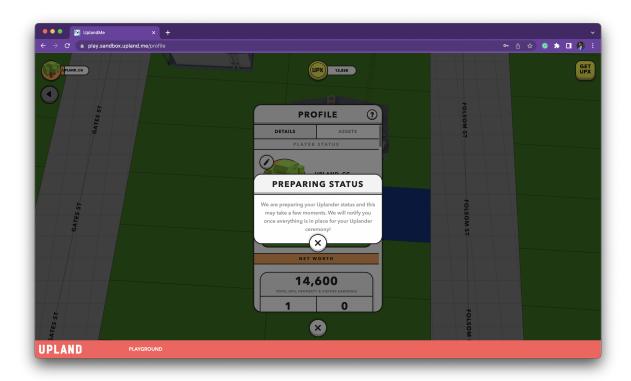
In a few seconds, you will receive a new message to level up.

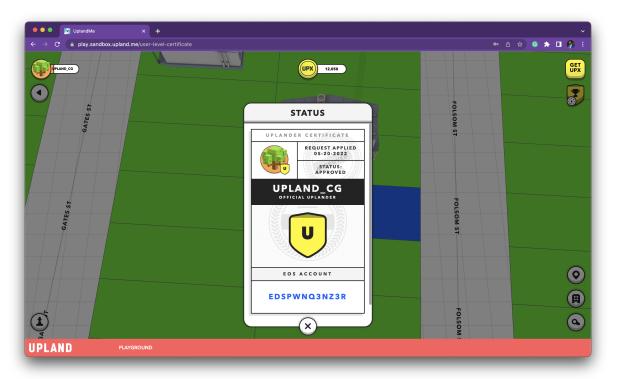




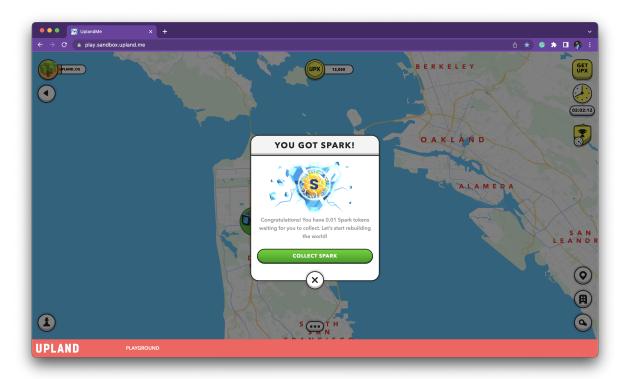
d. Please enter your phone number, and we will send you a verification code.

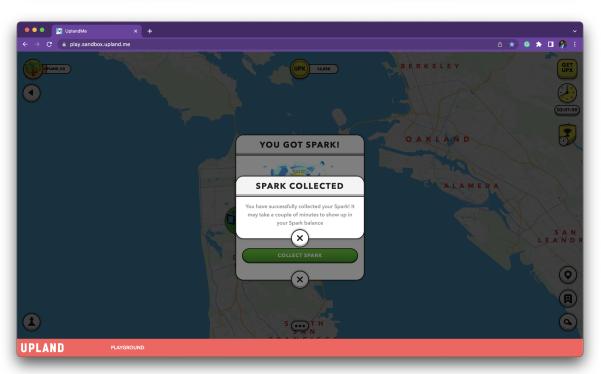




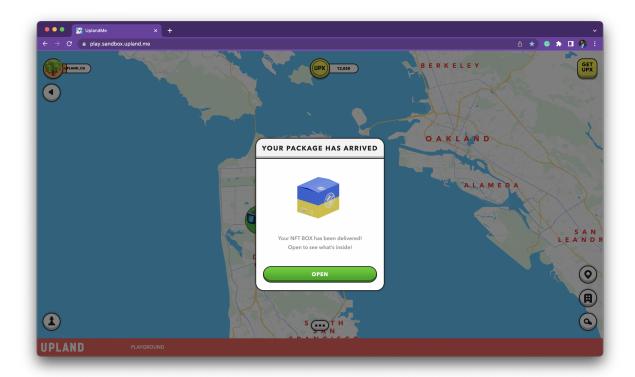


e. After you level up, you will earn some SPARKS.





f. The NFT box will arrive within 10 minutes.



Developer API and a Sample Usage Scenario

You can use the developer API to map user IDs, read information, and create and manage your escrow container. API specs are here -

https://api.sandbox.upland.me/developers-api

API Documentation: https://api.sandbox.upland.me/developers-api/ .

Escrow

In order to use a user's assets for the purpose of your application, you need first require the user to temporarily transfer his/her ownership to Upland. Upland in turn locks these assets in a vault-like account. In Upland terminology, this vault-like account, controlled by Upland, is called an escrow account

The developer is responsible to specify necessary assets the users have to transfer to the escrow account, in order to use your application (for example, a drag car-racing application will need a user to place at least one block explore, and one car in the escrow to participate).

Within the escrow account, each application is assigned an **escrow container**, which contains transferred assets necessary to use the application.

At junctions determined by your application logic, your application can request a **resolution of its escrow container** (for example, at the end of a drag car-racing application, the loser loses his block explore to the winner).

You can also query the content of your application's escrow container, request to extend its validity, etc.

A sample usage scenario

Assume your application is a chess game, where each piece is an Upland player's Block Explorer. You will start the game by -

- create an escrow container for your application instance.
- request players to place their block explorers into the above escrow container.
- Once sufficient block explorers are in the escrow containers, the game starts on your application.
- at the conclusion of the game, let's say the rule is winners takes losers' block explorers, your application will call the resolve escrow container API call, to request the ownership change.

You are able to place the following categories of assets in escrow:

- 1. UPX
- 2. SPARKS
- 3. Block Explorers
- 4. Structured Ornaments

5. Spirit Legits.

Application Registration

The first step to place your application on the portal is to register the application. Remember to use the same application name you specified when you register.

With the endpoint "/apps", the response will contain your application ID and application key.

User ID Mapping and Authentication

An authenticated user on your application must authorize using of his upland data/assets by the following process -

- 1. An API endpoint "/auth/otp/init" is provided for your appcalication to request a one time connection code.
 - a. Username: Your application ID
 - b. Password: Your Secret Key
- 2. Your application is responsible to provide the retuned connection code to the user authenticated in your application.
- 3. The user must return to his Upland account, and paste this code into his Upland account (as shown below). Once the connection code is validated by Upland, the user now has authorized your application to request data on his behalf.
- 4. The webhook you defined when registration for the application is used to retrieve 1) Upland ID of the user; 2) an access token unique to this Upland user, to be used in subsequent calls that require Upland user credentials.

```
Raw Content

{
    "type": "AuthenticationSuccess",
    "data": {
        "code": "B3F0HFBXE0",
        "userId": "ab374e80-d765-11ec-b21b-07f133e9e7e9",
        "accessToken": "eyJhbGci0iJIUzIINiIsInR5cCI6IkpXVCJ9.eyJhcHBJZCI6MTcsInVzZXJJZCI6ImFiMzc0ZTgwLWQ3NjUtMTFlYy1iMjFiLTA3ZjEzM2U5ZTdlOSIsImlhdCI6MTY1Mj
k40TI4MiwiZXhwIjoxNjg0NTI1MjgyfQ.vWmMCV3i0-R2L90lVcGdWrGvVoR6K7KH330WyklLVcM"
    }
}
```

5. Your application is responsible to persist the mapping of user IDs between your application and Upland, it is also responsible to persist the unique access token for each user using this access token. Consult API specs for details.

