

Web Games

Week 10 - Leaderboards





Objectives

- Learn you to implement a leaderboard in Construct 3
 - What is Supabase?
 - Why use it in games?
 - What is AJAX?
 - How Construct 3 uses AJAX
 - Using Supabase + AJAX together



1. Supabase



What Is Supabase?

Supabase is an open-source backend-as-a-service (BaaS) built on:

- PostgreSQL Database
- Authentication
- File Storage
- Auto-generated REST APIs

It provides the backend infrastructure so you don't have to build a server.



Supabase Key Features

- Full PostgreSQL database
- REST & realtime APIs automatically generated
- Authentication (email, OAuth, magic links)
- Row Level Security (RLS)
- Generous free tier



Why Use Supabase for Games?



- Leaderboards
- Cloud save data
- User profiles
- Secure and scalable backend
- No server maintenance required



2. *AJAX*



What Is AJAX?

AJAX stands for:

- **A**synchronous
- **J**avaScript
- **A**nd
- **X**ML (but usually JSON today)

It allows your game to send & request data to a server without reloading the page





AJAX in Construct 3

Construct provides an **AJAX object** enabling you to:

- Perform GET, POST, PUT, DELETE requests
- Add custom HTTP headers
- Send or receive JSON
- Handle responses via events like:
 - `On completed`
 - `On error`

AJAX Workflow in Games

1. Player triggers an action (finish level, press button)
2. Game creates an AJAX request
3. Server processes it (Supabase REST API)
4. Server returns JSON data
5. Game handles result and displays it



Supabase + AJAX = Easy Backend



Using both together lets you:

- Save scores to a database (POST)
- Fetch leaderboard (GET)
- Validate with database rules (RLS)
- Avoid building any custom backend code

This is ideal for Construct 3 and HTML5 games.

Example Use Case



Saving a player score

- Construct sends a POST request to Supabase REST API
- Supabase inserts a row into your database

Retrieving leaderboard

- Construct sends GET request
- Supabase responds with JSON array of scores



3. Leaderboard Demo

Supabase Sign-up



Go to <https://supabase.com/> and create an account

5 mins

Leadboard Demo



Let's take a look at leadboards in action.

You will find a starter file and key code snippets for creating the database on Ultra.





Inventory Demo

An additional video demo is provided on Ultra that expands on the features discussed today and shows how to implement a player inventory. This demo includes:

- User Authentication
- POST requests (saving the inventory)
- GET requests (getting the inventory)
- PATCH requests (updating the inventory)



4. Project Development

Project Development



Use the remainder of the session to explore the demo materials and continue project development on your playable prototypes.



Up Next...

Guest Talk - Paul West @ Fumb Games