

Information Technology for Logistics

Part 2: N8N

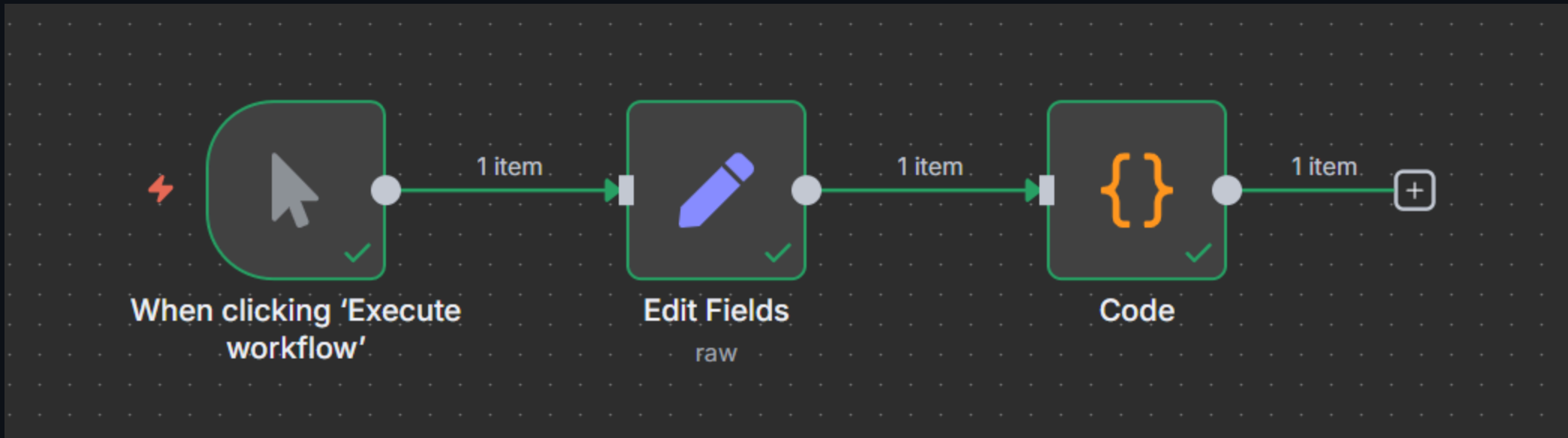
What is it?

n8n is an open-source workflow automation tool that allows users to automate tasks and connect different apps, services, and APIs using a simple, visual interface.

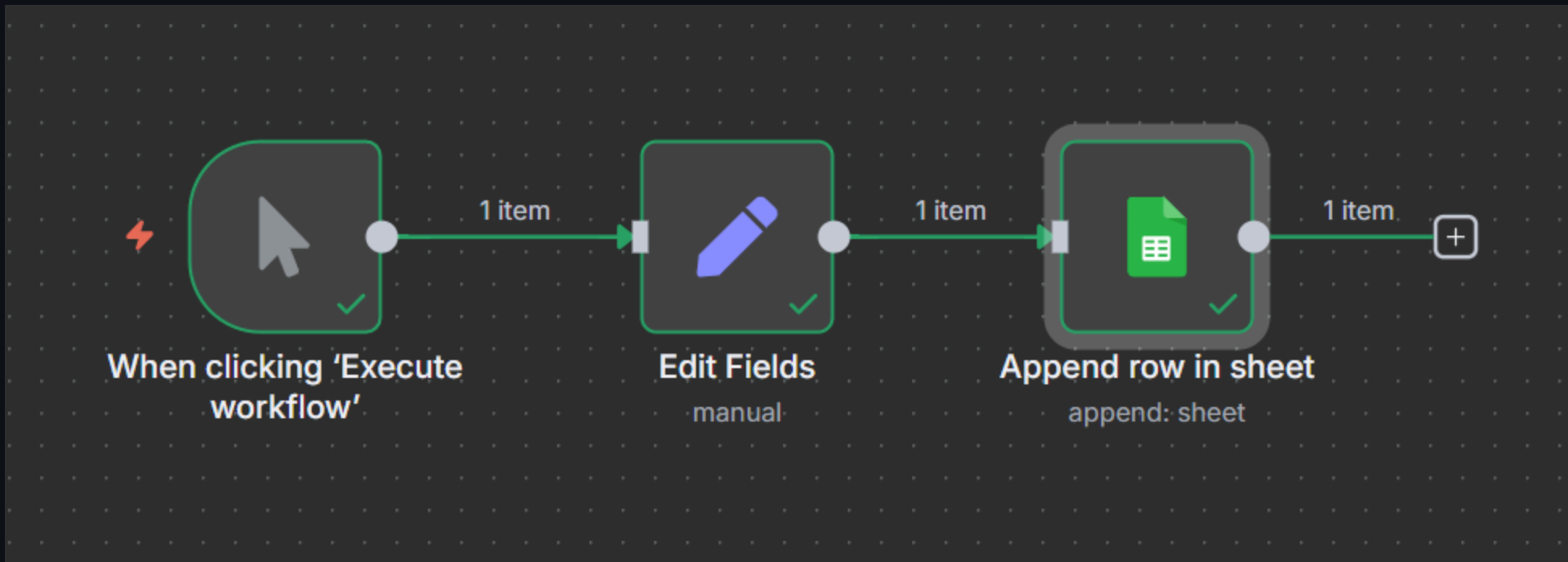
Installation

Guide

Basic Flow 1



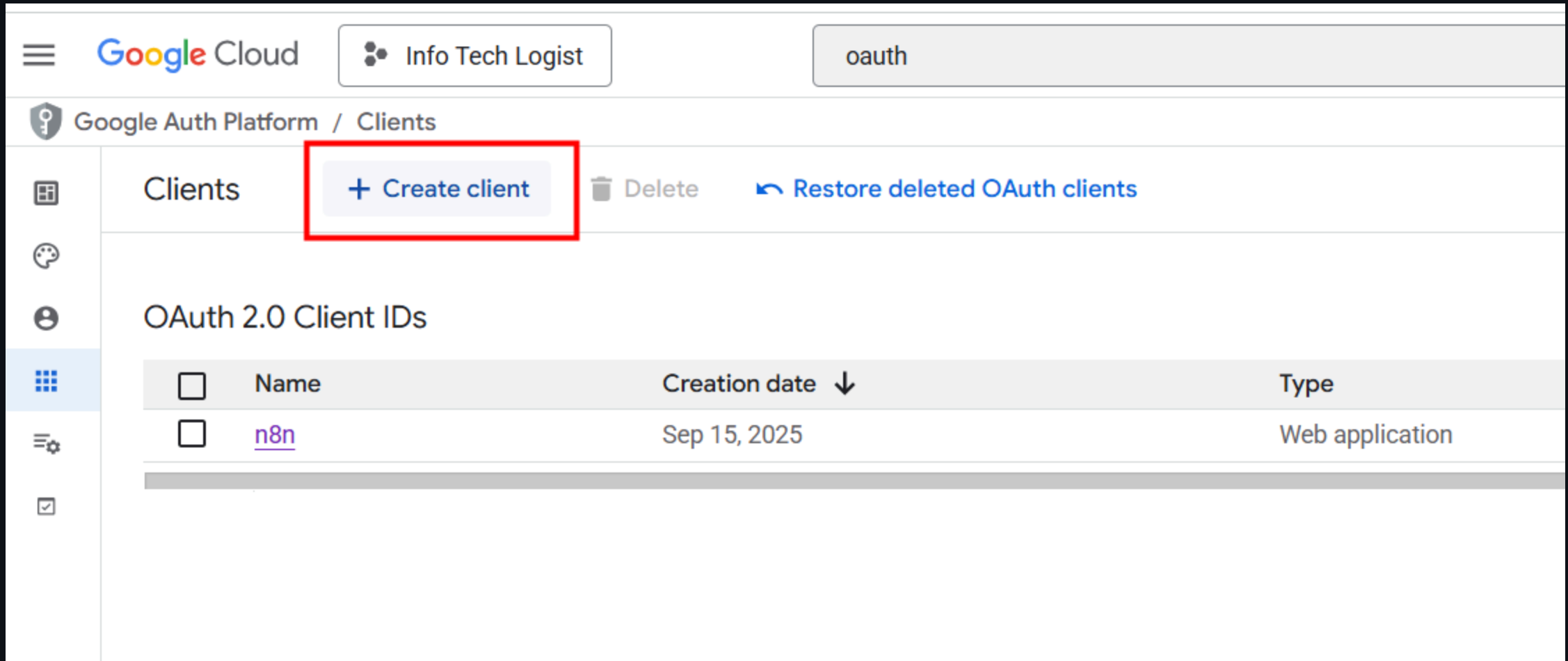
Google Sheet



Google Sheet

- Create new project in Google Cloud Platform
- Enable Google Sheet API
- Create "App" from the "Consent Screen"
- Create client from the app
- Add test user
- Enable Google Drive API

Create Client



The screenshot shows the Google Cloud console interface for the Google Auth Platform. The top navigation bar includes the Google Cloud logo, the user name 'Info Tech Logist', and a search bar containing 'oauth'. The main heading is 'Google Auth Platform / Clients'. Below this, there is a 'Clients' section with a '+ Create client' button highlighted by a red box. To the right of this button are 'Delete' and 'Restore deleted OAuth clients' links. Below the 'Clients' section is the 'OAuth 2.0 Client IDs' section, which contains a table with one client ID listed.

<input type="checkbox"/>	Name	Creation date ↓	Type
<input type="checkbox"/>	n8n	Sep 15, 2025	Web application

Add Test User

Google Cloud Info Tech Logist oauth

Google Auth Platform / Audience

Audience

External ?

Make internal

OAuth user cap ?

While publishing status is set to "Testing", only test users are allowed to access the app. Allowed user cap prior to app verification is 100 users, which is counted over the entire lifetime of the app. [Learn more](#)

1 user (1 test, 0 other) / 100 user cap

Test users

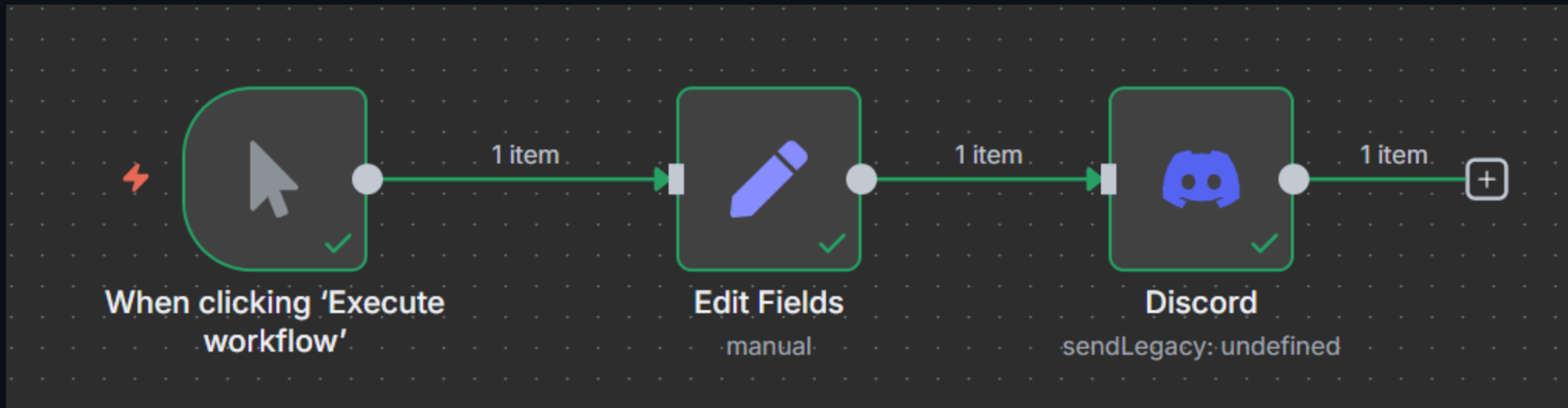
+ Add users

Filter Enter property name or value

User information
nnnpoo@gmail.com

Show less

Notification



Sensor

```
CREATE TABLE IF NOT EXISTS sensor_light (  
  id INT PRIMARY KEY AUTO_INCREMENT,  
  value VARCHAR(20) NOT NULL UNIQUE,  
  created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP  
);
```

Bookstore System

```
ALTER TABLE iebookstore.orderdetail  
ADD COLUMN IF NOT EXISTS created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP;
```