

# Activepieces Project Structure


The open-source workflow automation platform. A modern TypeScript monorepo built with Nx, featuring a custom execution engine and a pluggable 'pieces' architecture.

Updated 2025-12-30

#activepieces #typescript #fastify #react #monorepo #nx #automation

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## Project Directory

### activepieces/

- packages/ Nx Workspaces
  - engine/ Workflow logic ...
  - server/ Fastify API & W...
    - api/
    - worker/
  - react-ui/ Builder UI (Rea...
  - pieces/ Zapier-style in...
  - shared/ Shared TypeScri...
- nx.json Monorepo config
- package.json
- bun.lock Using Bun runti...

## Repository Info

Repository - [activepieces/activepieces](#)

Stars - 10k+

License - MIT

Last Analyzed - December 2025

## Tech Stack

Language - TypeScript

Backend - Node.js (Fastify)

Frontend - React

Database - PostgreSQL

Package Manager - Bun

Monorepo Tool - Nx

## Architecture Notes

Activepieces is built as a highly modular **Nx Monorepo**. The core execution logic is isolated in the **engine** package, which is used by both the **server** and potentially local runners. The **pieces** package is a collection of community-contributed connectors that follow a strict interface, allowing the platform to scale its integrations rapidly without complicating the core codebase.

## Key Directories

**packages/engine/** - Contains the logic for traversing the flow graph, evaluating variable expressions, and executing individual steps.

**packages/pieces/** - The library of integrations. Each piece is an isolated folder containing its own logic, metadata, and assets.

**packages/react-ui/** - The user-facing builder. It uses React and a heavy drag-and-drop implementation to provide a visual interface for flow construction.

## Why This Structure?

Activepieces is a modern alternative to Zapier or n8n. Its structure demonstrates how to build a 'Piece-based' ecosystem where the core platform remains stable while integrations evolve independently.