Code Graph Explorer

Collaborative Code Visualization Platform

Creating a living map of your code

Analyze graph-based views of code structure

Collaborate live on the same workspace

Save and reload project states

Introduction of the team

Jerome Tran

- Project Manager
- Full stack

Pierre Lionnel Obiang

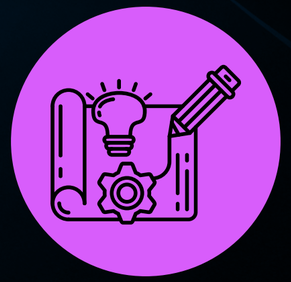
- Backend

Ryota Higa

- Frontend

Sprint

1.Brainstorming, research stacks



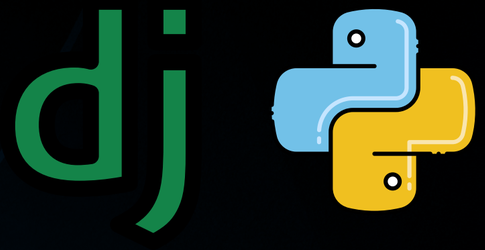
2. Prototypes frontend, discover django, websocket

3.User system, auth, hash, DB

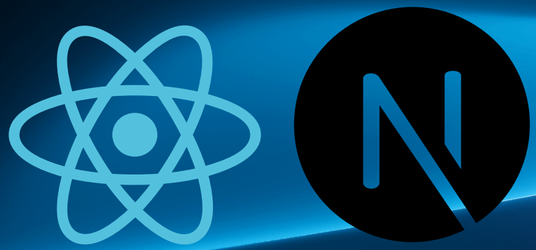
4. Tests, documentation, diagrams

Technologies used

Backend



Frontend



Deployment

Real-time Features

WebSockets

Database

Reverse Proxy (Caddy)

Project Management

Taiga

Code Snipet

```ts
// Accepted file types for parsing
export const ALLOWED_EXTS = new Set([
  ".c", ".h", ".py", ".html", ".css", ".js", ".ts", ".tsx", ".jsx",
]);

// ----------------------------
// Python function declaration and call detection
// ----------------------------
const PY_DECL_RE = /^[ \t]*def\s+([A-Za-z_]\w*)\s*\(/gm;
const PY_CALL_RE = /\b([A-Za-z_]\w*)\s*\(/g;

// Inside the main parsing function
export function extractFunctionFacts(filename: string, content: string) {
  const ext = extname(filename);
  const declared: string[] = [];
  const called: string[] = [];

  // Parse only if this is a Python file
  if (ext === ".py") {
    let m: RegExpExecArray | null;

    // --- Detect declared functions (def foo():) ---
    while ((m = PY_DECL_RE.exec(content))) declared.push(m[1]);

    // --- Detect called functions (foo()) ---
    while ((m = PY_CALL_RE.exec(content))) {
      const name = m[1];
      if (RESERVED_WORDS.has(name)) continue;  // skip keywords like if(, for(
      const prev = content.slice(Math.max(0, m.index - 2), m.index);
      if (prev.includes(".")) continue;        // skip obj.method()
      called.push(name);
    }
  }

  // --- Return results to the graph page ---
  // The GraphPage component calls this function for each file
  // and uses the returned data to build the visual call graph.
  return {
    declared: Array.from(new Set(declared)),  // unique declared functions
    called: Array.from(new Set(called)),      // unique called functions
  };
}
```

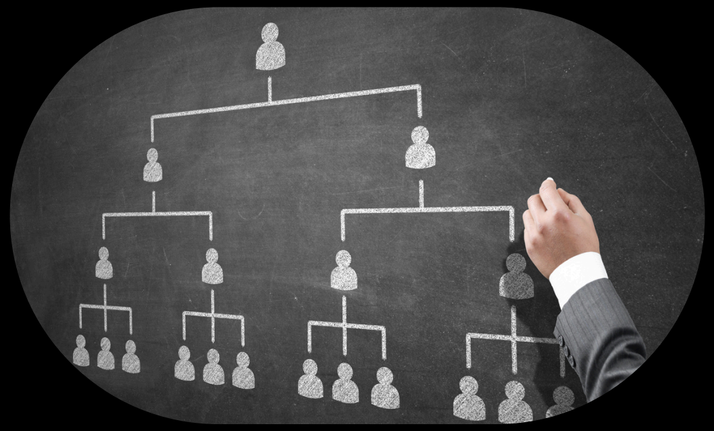
Challenges encountered

Graph system

Code parsing system

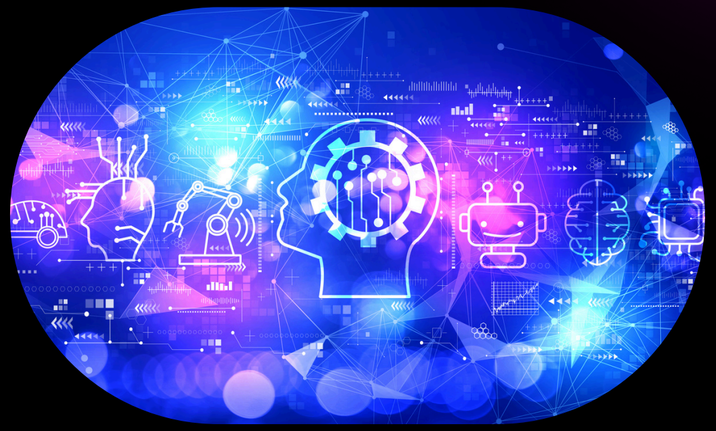
implement different languages with common system

Lessons Learned



Team organization

Soft skills/Agile



New technologies

Next steps

Notifications

Email retrieve

RGPD Protection

Thank You!

Questions?