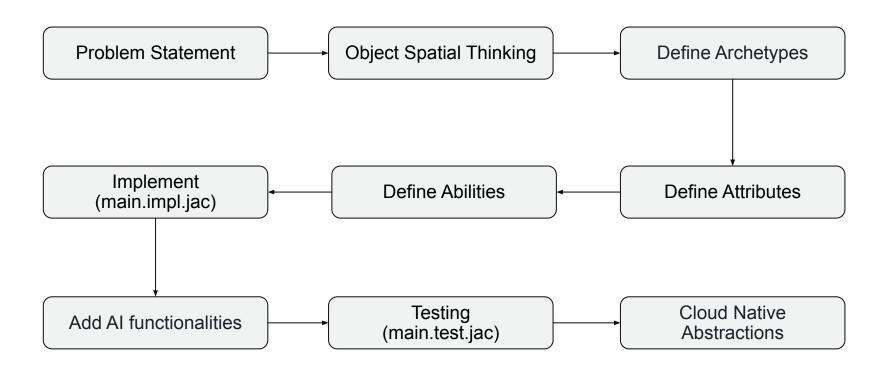
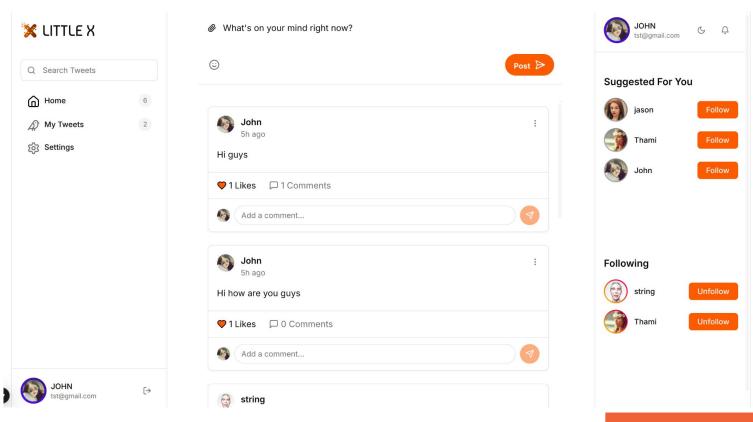
Jaseci Seminar



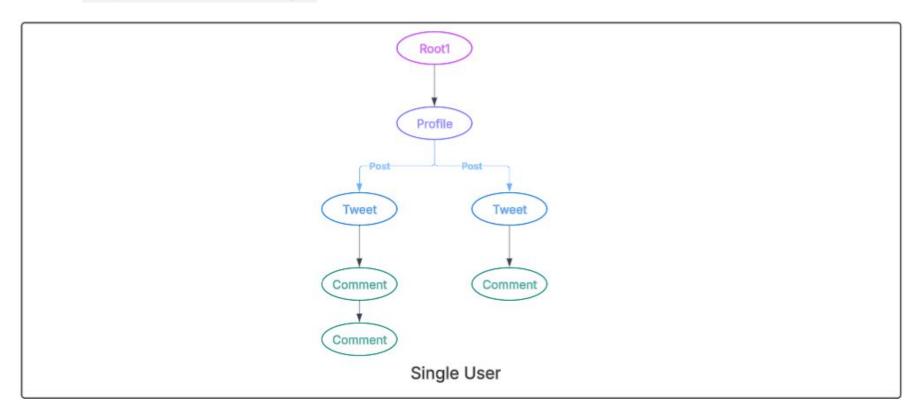
Jaseci Coding Workflow



LittleX: A Minimalistic Social Media Platform Prototype



Object Spatial Thinking



Define Archetypes

Nodes

Profile

Tweet

Comment

<u>Edges</u>

Post

Walkers

create_profile update profile

```
```jac
Define Profile node
node Profile { }
Define Tweet node
node Tweet { }
Define Comment node
node Comment { }
Define Post edge
edge Post { }
Define create profile
walker create_profile { }
Define update profile
walker update_profile { }
```

#### **Define Attributes**

```
```jac
# Define Profile node
node Profile {
      has username: str = "";
# Define Tweet node
node Tweet {
      has content: str;
# Define Comment node
node Comment {
      has content: str;
. . .
```

```
```jac
Define Post edge
edge Post {}
Define create profile
walker create_profile {
 has username: str;
Define update profile
walker update_profile {
 has new_username: str;
```

#### **Define Abilities**

```
```jac
# Define Profile node
node Profile {
       has username: str = "";
       # Declare update ability
       can update with update_profile entry;
# Define Tweet node
node Tweet {
       has content: str;
# Define Comment node
node Comment {
       has content: str;
. . .
```

```
```jac
Define Post edge
edge Post { }
Define create profile
walker create_profile {
 has username: str;
 # Declare create ability
 can create with 'root entry;
Define update profile
walker update_profile {
 has new_username: str;
. . .
```

#### **Implement**

```
"'jac
Define create ability
impl create_profile.create {
 if not [here -> ('?Profile)] {
 here ++> Profile(self.username);
 }
 # if not [root -> ('?Profile)] {
 root ++> Profile(self.username);
 # }
}
```

#### **Add AI Functionalities**

```
import from mtllm.llm { Model }
glob llm = Model(model_name="gemini/gemini-2.5-flash");
def translate(eng_sentence: str, target_lang: str) -> str by llm();
with entry {
 print(translate("Hello World", "Language spoken in Somalia"));
 print(translate("Good morning", "The language of Cervantes"));
 print(translate("Thank you", "What people speak in Tokyo"));
}
```

#### **Testing**

```
"'jac
#Test create ability
test create_profile_walker {
 root spawn create_profile("Elon");
 profile = [root --> ('?Profile)][o];
 check isinstance(profile,Profile);
 check profile.username == "Elon";
}
```

```
"''jac

Test update ability

test update_profile_walker {
 root spawn update_profile("Musk");
 profile = [root --> ('?Profile)][o];
 check profile.username == "Musk";
}
```

#### **Cloud Native Abstractions**

