

#rust

#personal-project

Scoping (MVP)

- User can create an account and authenticate
- User can upload PNG or JPEG photo
- If photo has geolocation metadata it will get pinned on an interactive map
- If photo does not have geolocation metadata user will get a notification and image will not be imported to system

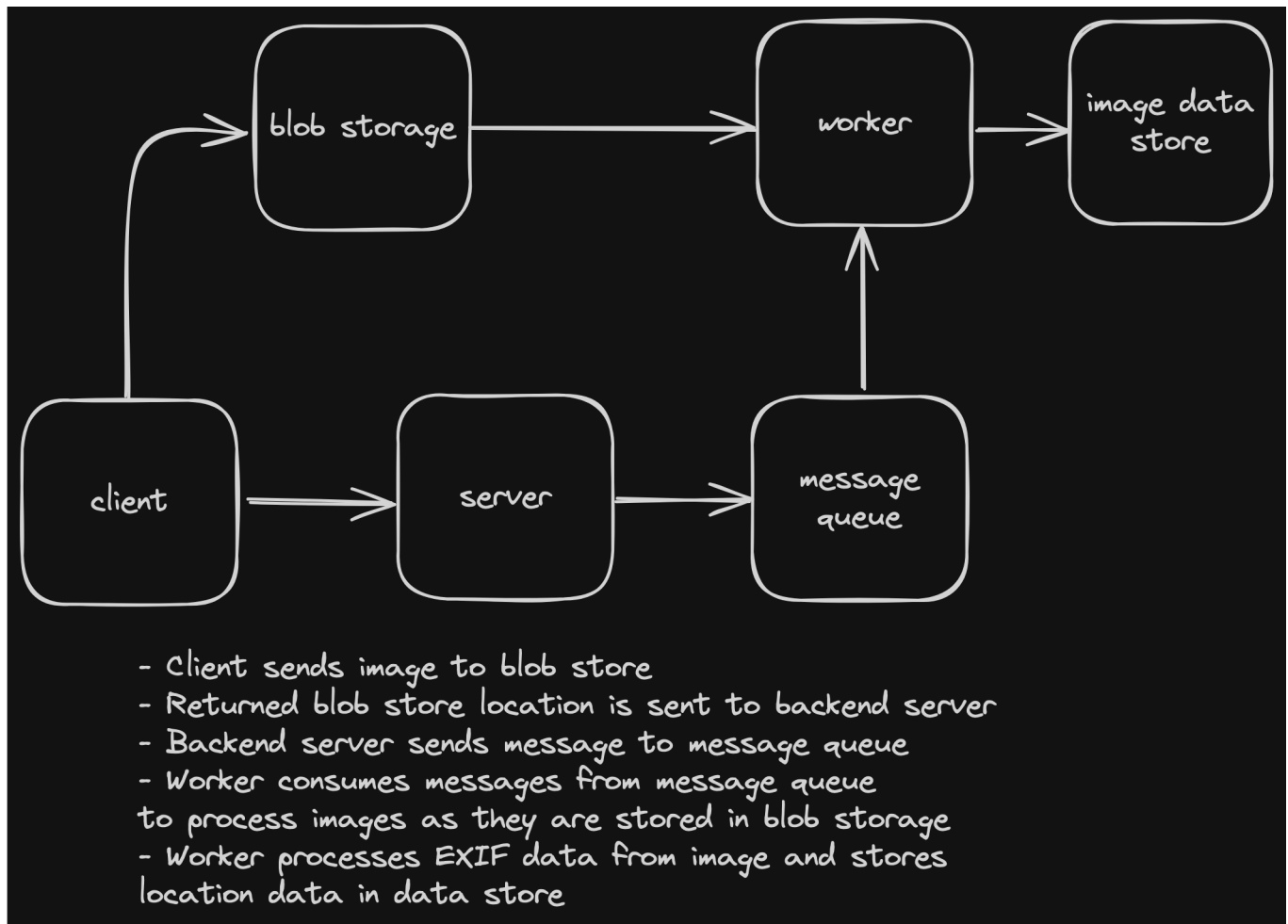
Scoping (Phase 2)

- User can select location on map if no geolocation metadata

Technical design

Flow

User uploads photo -> photo is placed in to blob storage -> sends event to queue system with image metadata -> worker picks up event -> worker sends geolocation to data store



Data models

Data store

Tables: users (User entity), images (ImageData entity)

```
!theme minty

entity ImageData {
    id PK Uuid
    user_id FK Uuid
    coordinates geography(POINT)
    blob TEXT
}

entity User {
    id PK Uuid
    first_name TEXT
    last_name TEXT
    username TEXT
    email TEXT
}
```

Message queue

```
!theme minty

entity NewImageUploadEvent {
    id int

    /* the location where the image was imported to in blob storage */
    source String

    / * the id of the user the uploaded the image */
    user_id int
}
```

API

POST /api/v1/images

DTO

```
!theme minty
```

```
struct ImagesDto {  
    id int  
    source String  
    user_id int  
}
```

Response

201 Created

400 Bad request

401 Unauthorized

GET /api/v1/user/:user_id/images

Response

200 OK

400 Bad request generic service error

401 Unauthorized no jwt or invalid jwt

403 Forbidden attempting to access user_id that is not in jwt

Response Body

```
!theme minty
```

```
struct Images {  
    images Vec<Image>  
}
```

```
struct Image {  
    latitude String  
    longitude String  
    source String  
}
```