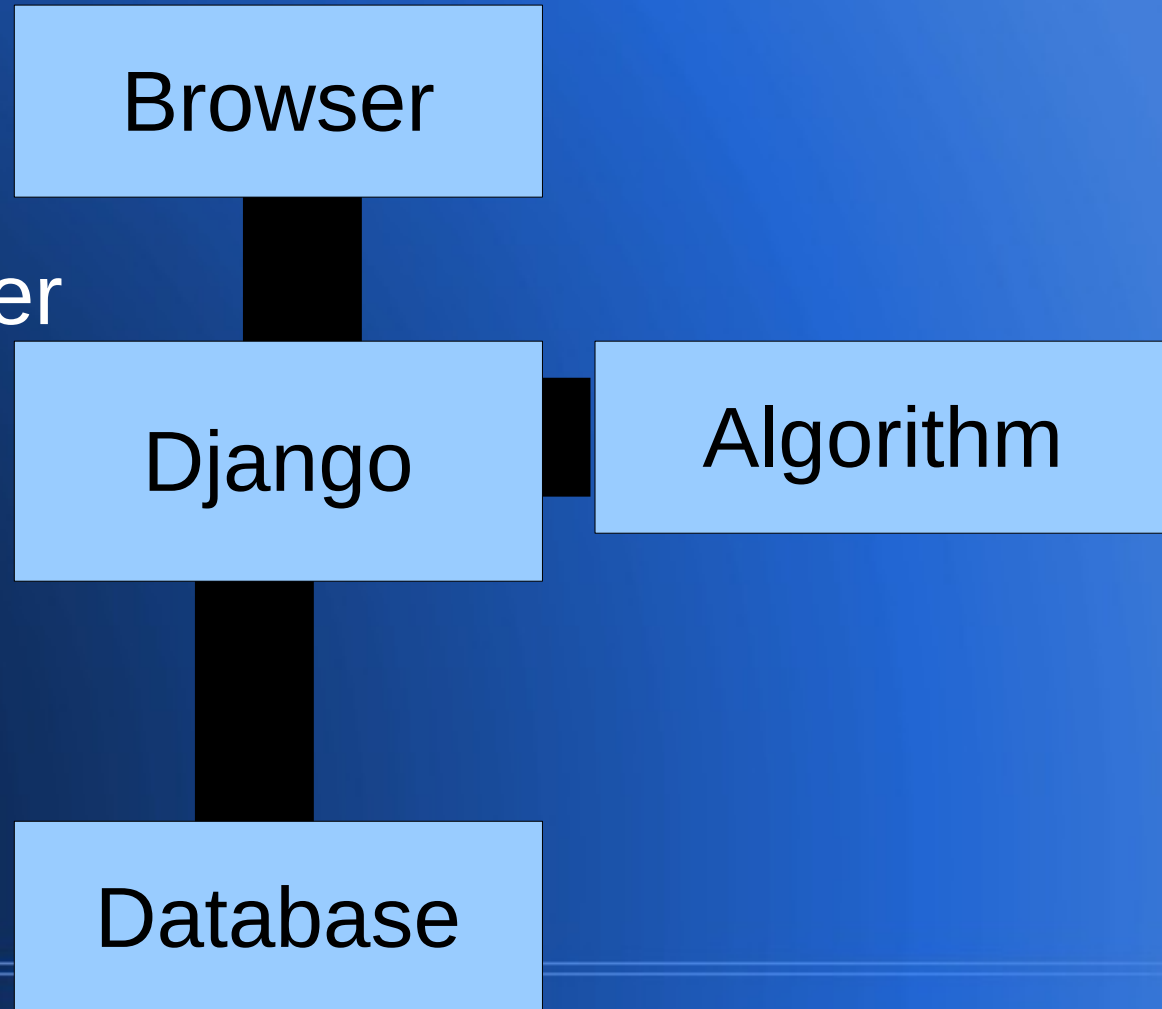# S.C.O.R.E. Scheduling

Benjamin Ross, Eric Steggal, Justin Lazaro, Sabba Petri, Will Crawford
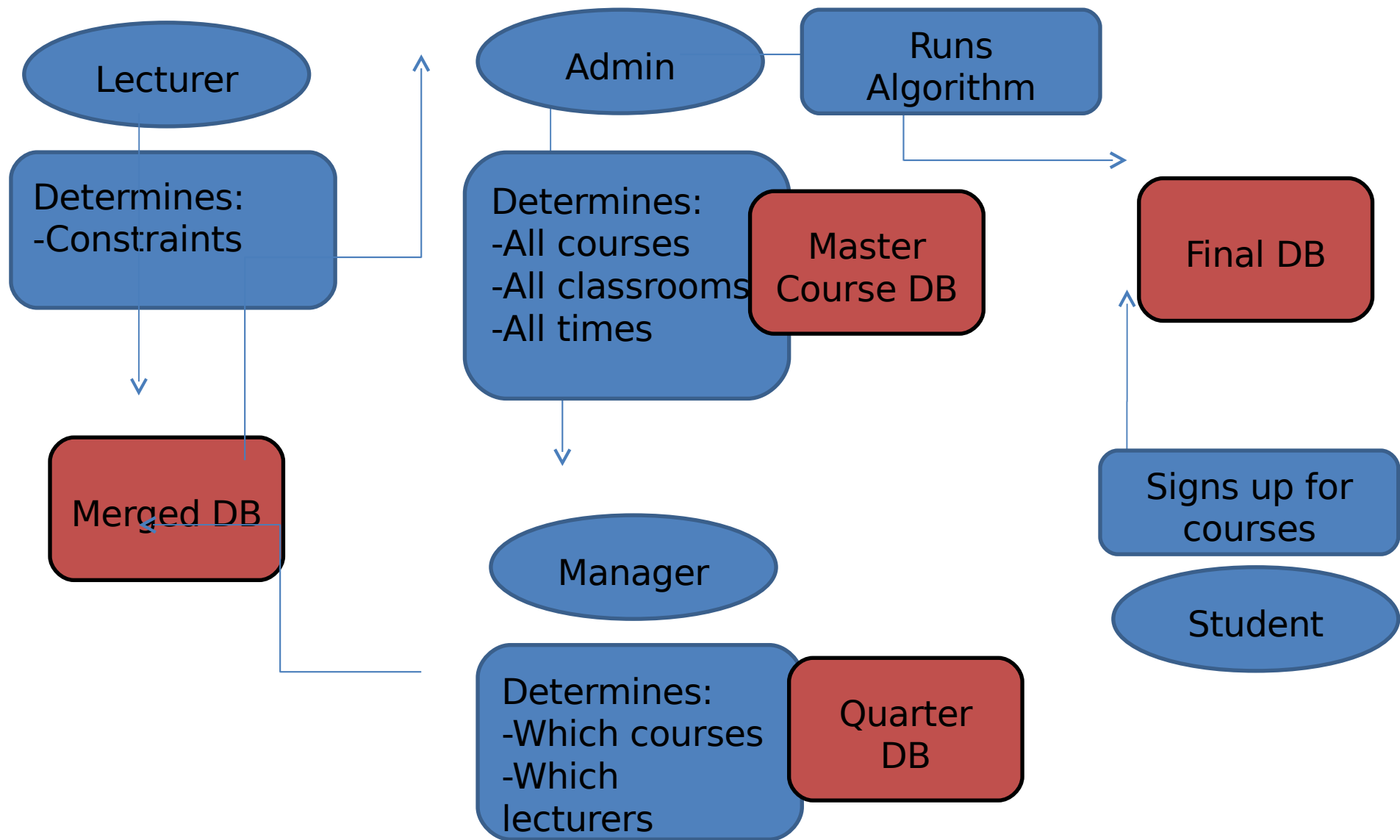
Recap

- Score Project

- Optimizing Course Scheduling for Universities

High-Level Architecture

- Storage: MySQL
- Protocol: HTTP
- User Selected Server
- Major Processes
  - Django
  - Algorithm

```
          ┌──────────┐
          │ Browser  │
          └────┬─────┘
               │
          ┌────┴─────┐    ┌───────────┐
          │  Django  │────│ Algorithm │
          └────┬─────┘    └───────────┘
               │
          ┌────┴─────┐
          │ Database │
          └──────────┘
```

Lecturer

Determines:
-Constraints

Admin

Runs
Algorithm

Determines:
-All courses
-All classrooms
-All times

Master
Course DB

Final DB

Merged DB

Signs up for
courses

Manager

Student

Determines:
-Which courses
-Which
lecturers

Quarter
DB

Final Flow chart

In depth: UI

- Dynamic HTML
- Four Different UI's

Log in screen for all users

Welcome to the UCSC MyPortal website
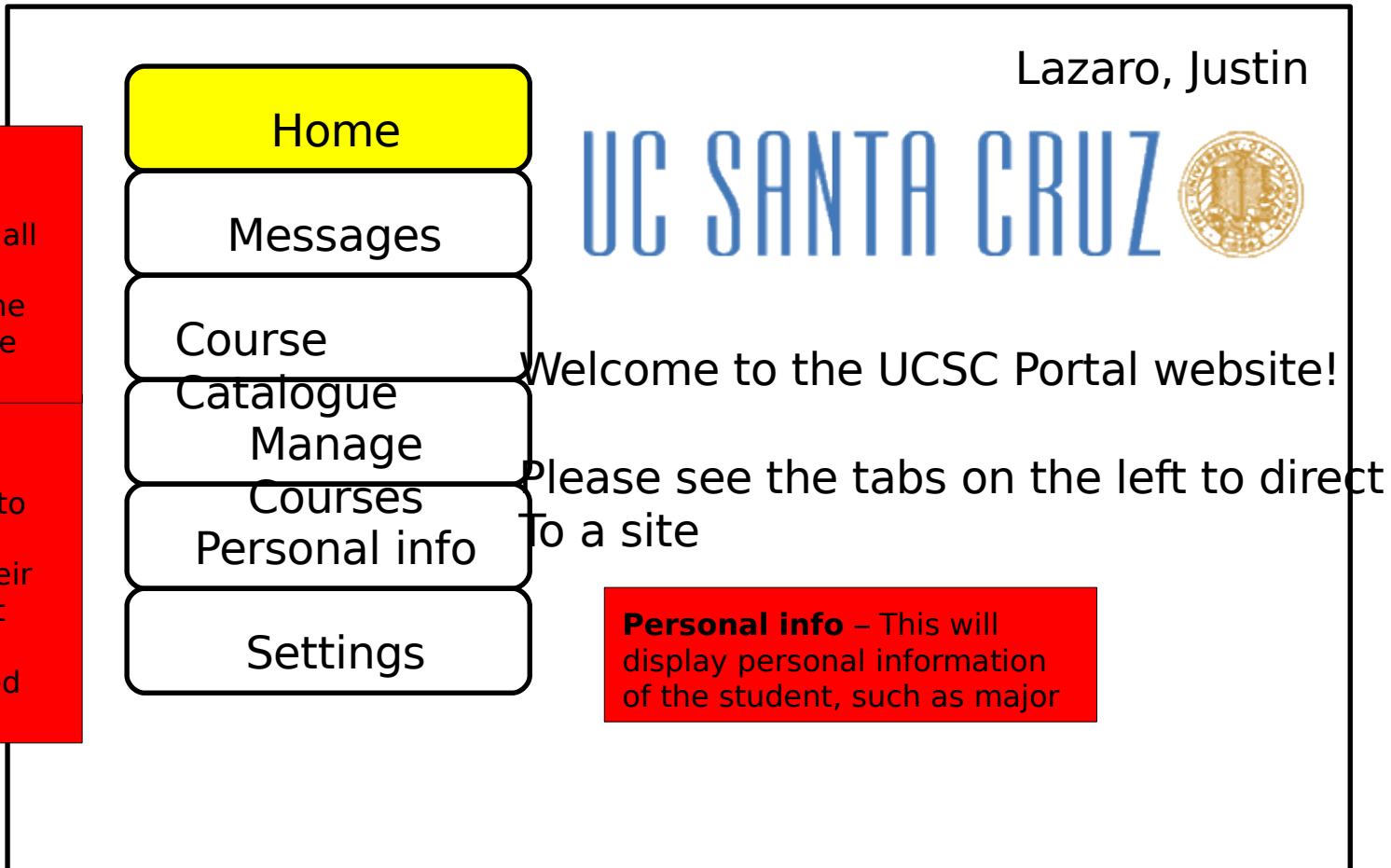Please enter your username and password to continue

UC SANTA CRUZ

Username

(your ucsc email address without the @ucsc.edu)

Password

Student Home UI

Home

Messages

Course Catalogue

Manage Courses

Personal info

Settings

Lazaro, Justin

UC SANTA CRUZ

Welcome to the UCSC Portal website!

Please see the tabs on the left to direct To a site

In Depth: Django

- Handles Network Communication Protocols
- One Thread Per Request

In Depth: Algorithm

- Similar to Genetic Algorithms
- Picked over Constraint Solvers

Risks

- Getting the Algorithm wrong, or not finding a suitable one

- Server Crash

Timeline

- Algorithm: 1-2 Months
- UI: 2-3 weeks
- Django: 1-2 Months