



NUCLEUS

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Engenharia e Gestão de Serviços 2023/24

WHO ARE WE?

- **NucleUS** is an app that aims to assist **Students Representative Groups** to better reach the **students** they represent
- We offer a platform for the groups to expose their projects, and at the same time let students follow the groups they are more interested in
- We provide a dynamic approach which includes a Points System that incentivizes students to participate in events organized by the groups

ASSOCIATIVISM FOSTERS STUDENT INTEGRATION, AND SO DO WE.



**POINTS SYSTEM
SERVICE**



**EVENTS
MANAGEMENT
SERVICE**

**AUTHENTICATION
SERVICE**



UI / BACKEND



SERVICES



- **POINTS SYSTEM SERVICE**

- Service that allows users (students) to earn points to be spent on whatever the student groups define.

BÁRBARA MOREIRA



- **AUTHENTICATION SERVICE**

- Service that allows the system to add, delete and update new users, do its authentication and validation.

DAVID BICHO

SERVICES



- **EVENTS MANAGEMENT SERVICE**

- Service that allows to create and announce new events and activities to the community.

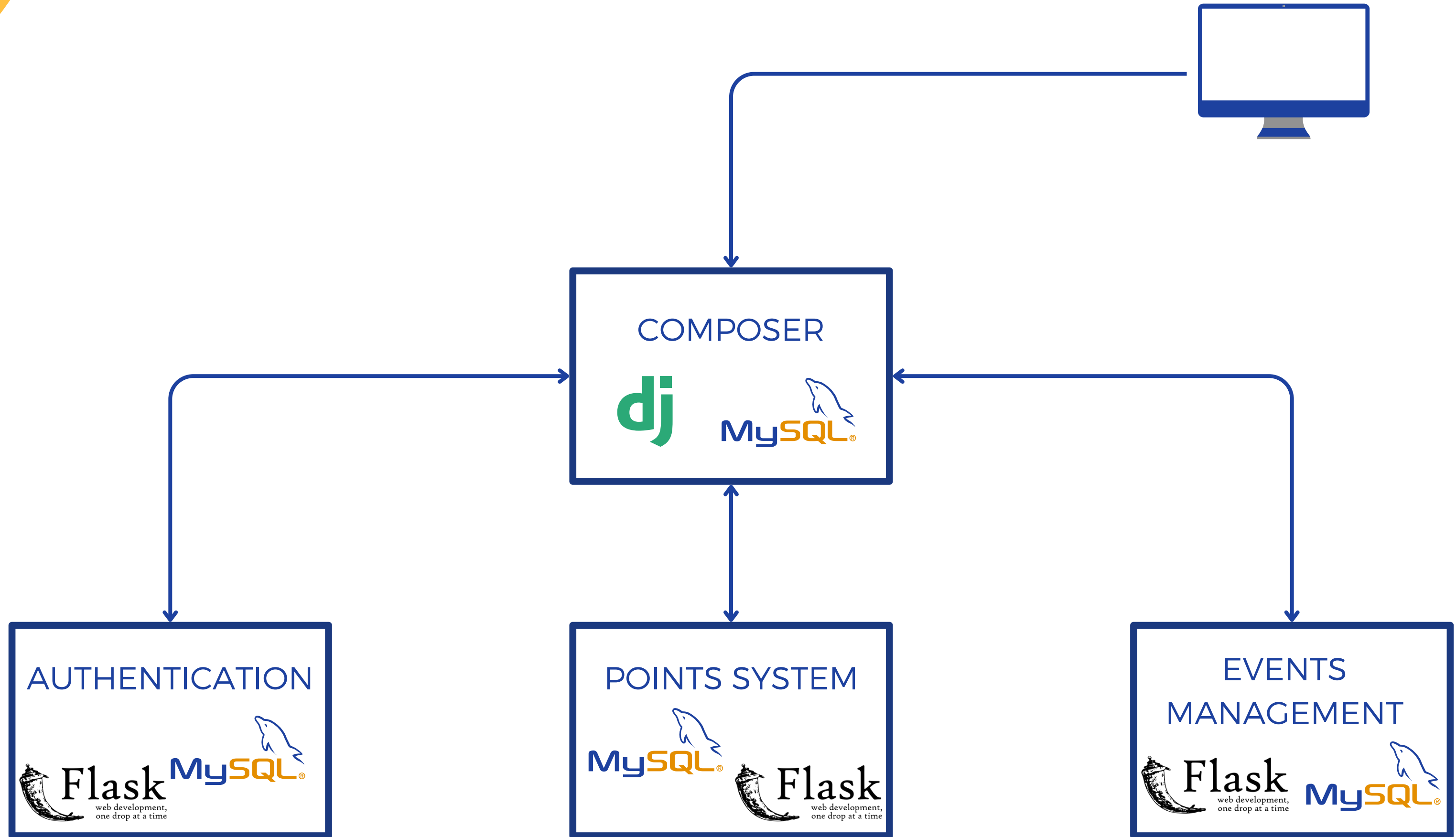
LARA RODRIGUES



- **AGGREGATION SERVICE**

- Service that unites all other services to create a functional WebApp.

DIOGO CORREIA





AUTHENTICATION

SERVICE ENDPOINTS

DAVID BICHO

- AUTHENTICATION SERVICE

- **POST /signin** - Creation of a new user (if needed) and login
- **POST /nucleossignin** - Creation of a new nucleo and login
- **POST /register** - Add some registering info if first time
- **POST /logout** - Log out of the webApp
- **GET /nucleus** - Lists all nucleos logged in
- **GET /user** - Lists all user information
- **GET /students** - Lists all students of a nucleo



UA IDP





AUTHENTICATION

WEBAPP API ENDPOINTS

DAVID BICHO

- **API AUTHENTICATION SERVICE**
 - **POST /auth/signin** - Login with UA IDP
 - **POST /auth/nucleossignin** - Creation of a new nucleo and login
 - **POST /auth/register** - Add some registering info if first time
 - **GET /auth/nucleus_students/<nucleo_id>** - Lists nucleo's students
 - **GET /auth/user** - Lists user information
 - **GET /auth/nucleos** - Lists all nucleos



EVENTS MANAGEMENT SERVICE

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SERVICE ENDPOINTS

- **POST /events** - Creation of a new event
- **DELETE /events?id=<event_id>** - Delete an event
- **PATCH /events?id=<event_id>** - Update event information
- **POST /events?id=<event_id>** - Register for an event
- **GET /events?entity=<entity_id>** - Get event by an entity that creates groups
- **GET /events?date_from=<date>&date_to=<date>** - Filter event by data
- **GET /events?type=<type>** - Get event by type
- **GET /events?location=<location>** - Get event by location
- **GET /events?price=<price>** - Get event by price





EVENTS MANAGEMENT SERVICE

LARA RODRIGUES

WEBAPP API ENDPOINTS

- **POST /events** - Creation of a new event
- **GET /events** - Display events



POINTS SYSTEM

SERVICE ENDPOINTS

BÁRBARA MOREIRA

- **PATCH /points/entity/<entity_id>?object=object_id** - Add or remove points to an entity
- **GET /points/entity/<entity_id>/history** - History of points transactions
- **POST /points/type** - Add a new points type
- **DELETE /points/type** - Remove type of points
- **GET /points/standings** - Get general standings of all entities
- **GET /points/standings?type=<points_type>** - Get standings of a points type



Flask
web development,
one drop at a time





POINTS SYSTEM

WEBAPP API ENDPOINTS

BÁRBARA MOREIRA

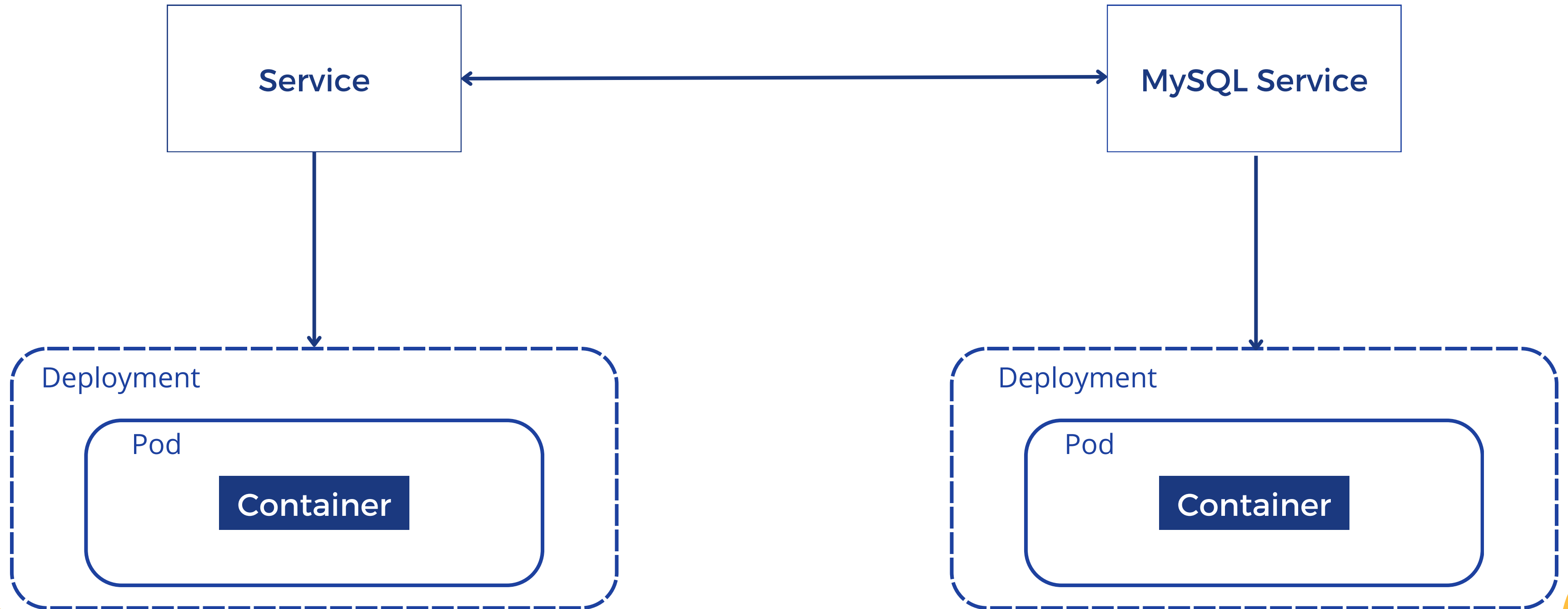
- **GET /points/standings** - Get general standings of all users (**NUCLEO AND USER SIDES**)
- **GET /points/entity** - Get current points of user (**NUCLEO AND USER SIDES**)
- **PATCH /points/entity/<entity_id>** - Add or remove points to an user (**NUCLEO SIDE**)



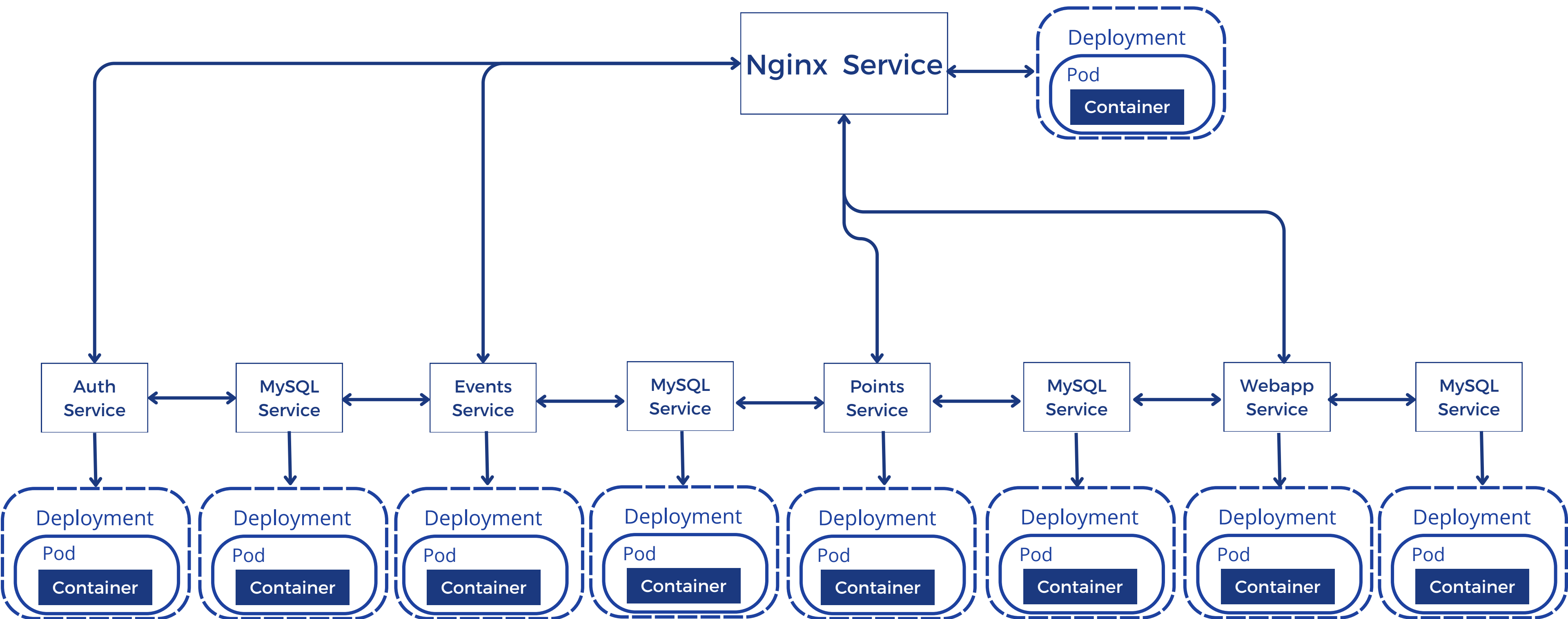
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SERVICE DEPLOYMENT



DEPLOYMENT DIAGRAM



FUTURE WORK

- IMPLEMENTING SEARCH FILTERS
- UPDATE USER POINTS
- POINTS MANAGEMENT
- EXPAND OUR PLATFORM TO ALL UNIVERSITIES

LIVE DEMO