Schedules 2

Helmich, Faustus, Toma, Turčan, Malý

Everyone

Core features

- Users – Student, Teacher, Manager, Scheduling committee

1. Create subjects (Teacher)
2. Approve Subject (Manager)
3. Define time and space requirements (Teacher)
4. Display graphical interface for scheduling subjects and save changes (Scheduling committee)
5. View schedules (Student)

Toma, Turčan

Create subjects (Teacher)

As a teacher, I need to create a subject and define information about it (name, syllabus, description…), so managers can decide whether the subject is sufficiently useful.

Responsibilities

- Authentication and authorization
- Content validation and management
- Notifications and workflow
- User interaction

Approve Subject (Manager)

As a manager, I need to approve a subject proposed by a teacher, so the teacher can define time options and the Scheduling committee can schedule the subject.

Responsibility Breakdown:

- Authentication and authorization
- Approval processing
- Notifications and workflow
- Storage and audit

Toma, Turčan

Define time and space requirements (Teacher)

- As a teacher, I need to define the time and space requirements of a subject, so that the scheduling committee can schedule it.

Responsibility Breakdown:

- Authentication and authorization
- Inputs and validation
- Availability and collisions
- Storage and audit

Display graphical interface for scheduling subjects and save changes (Scheduling committee)

As a Scheduling committee, I need to view a graphical interface for scheduling subjects, so I can schedule a subject and users can view schedules.

Responsibility Breakdown:

- Authentication and authorization
- Data retrieval and selection
- Interactive planning
- Storage and audit

View schedules (Student)

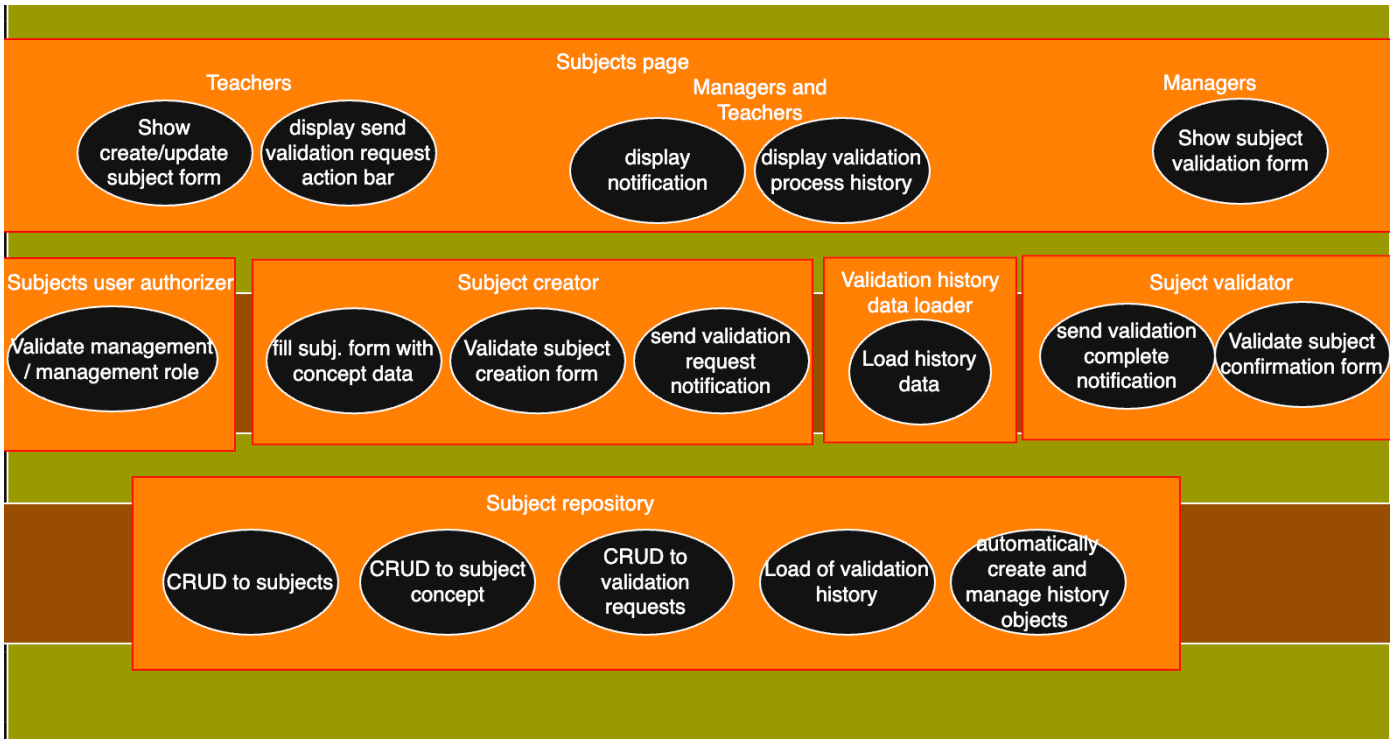
As a student, I need to clearly display a weekly schedule so I can plan my days.

Responsibility Breakdown:

- Authentication and authorization
- Data retrieval and selection
- Presentation
- Error and exception handling
- User interaction and export

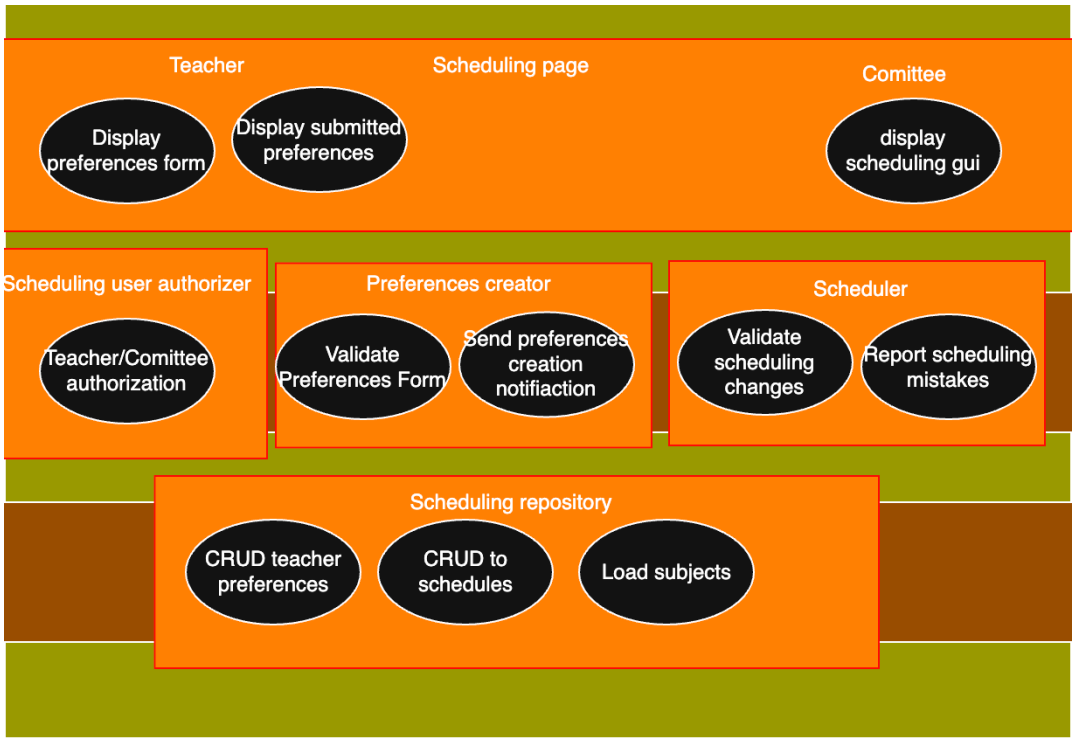
Everyone

Creating and Validating Subjects



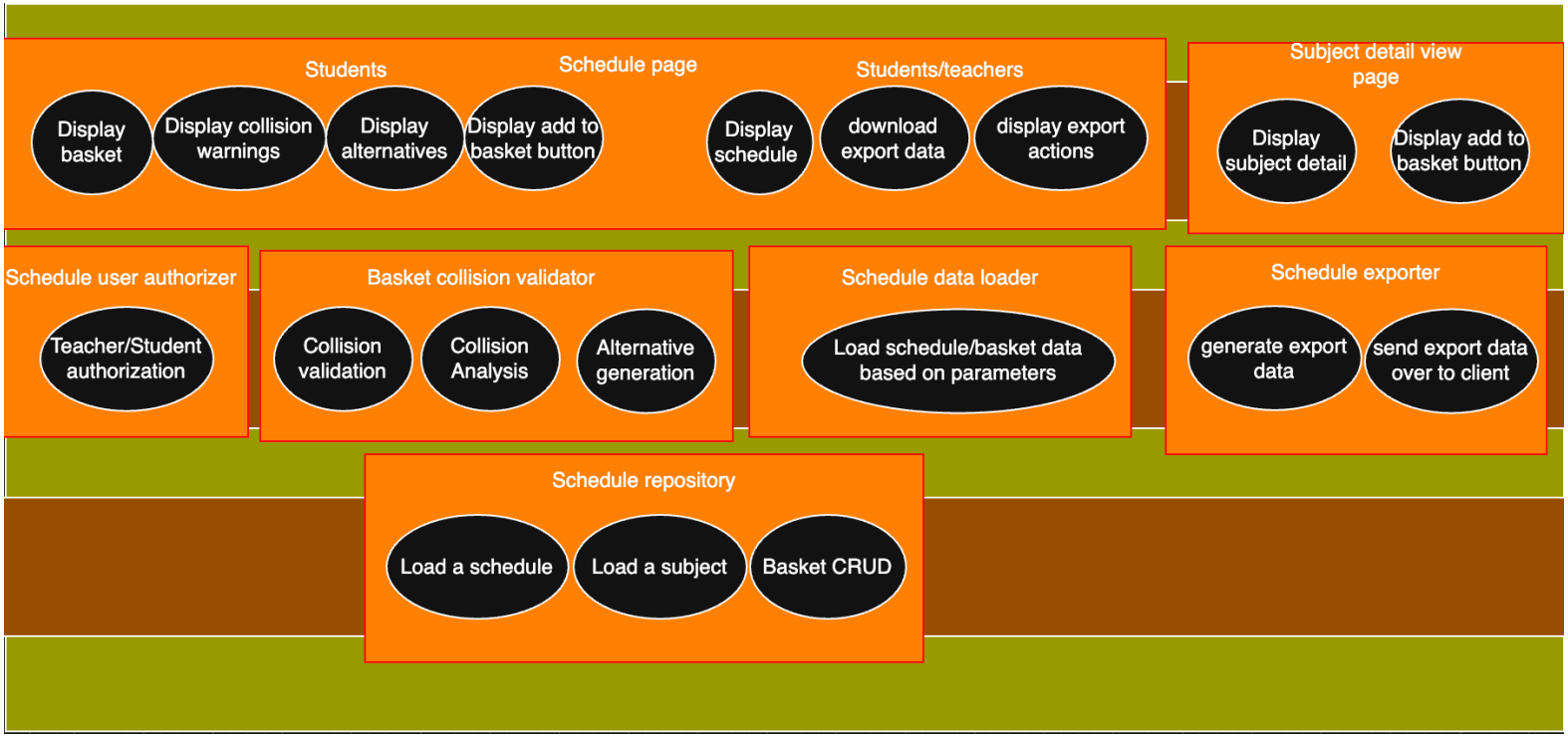
Everyone

Scheduling classes



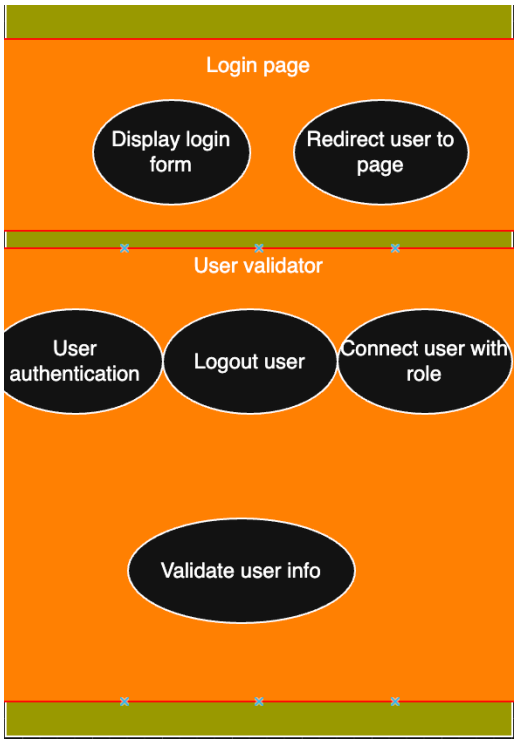
Everyone

Access to Schedules



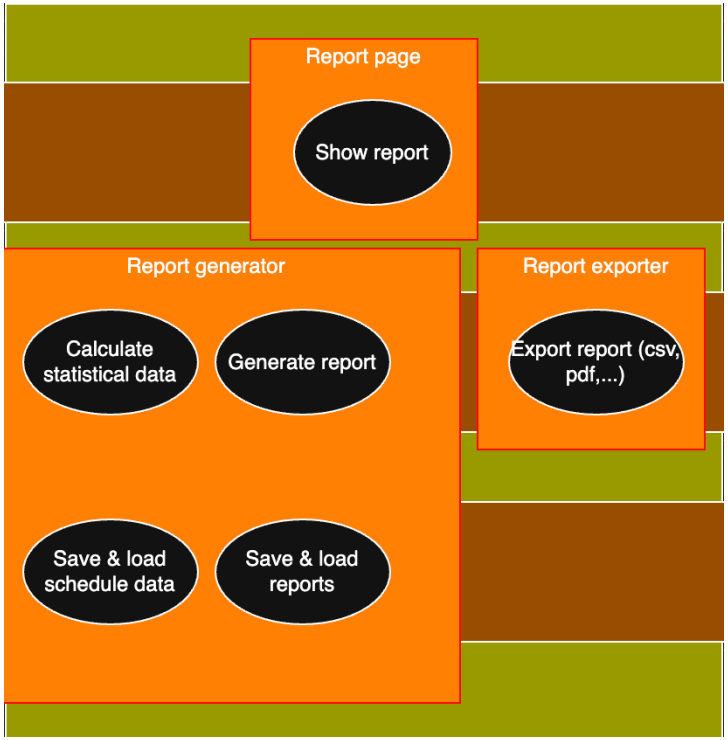
Everyone

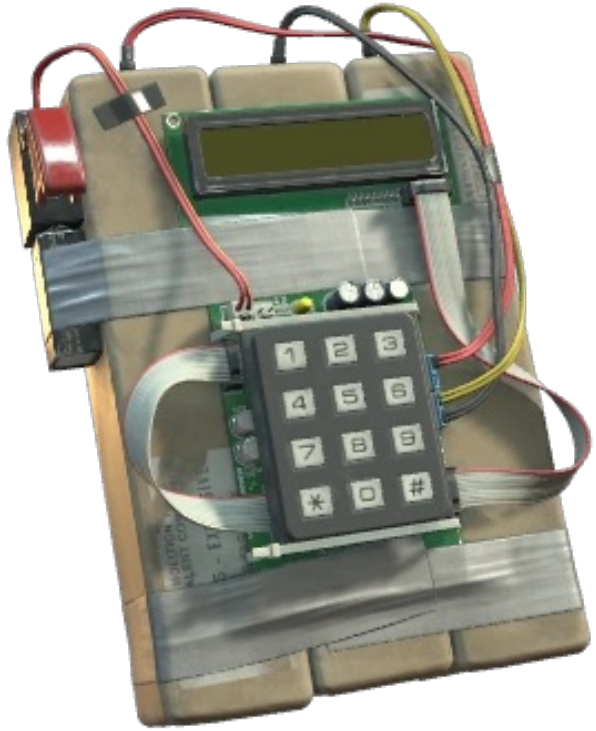
User Validation



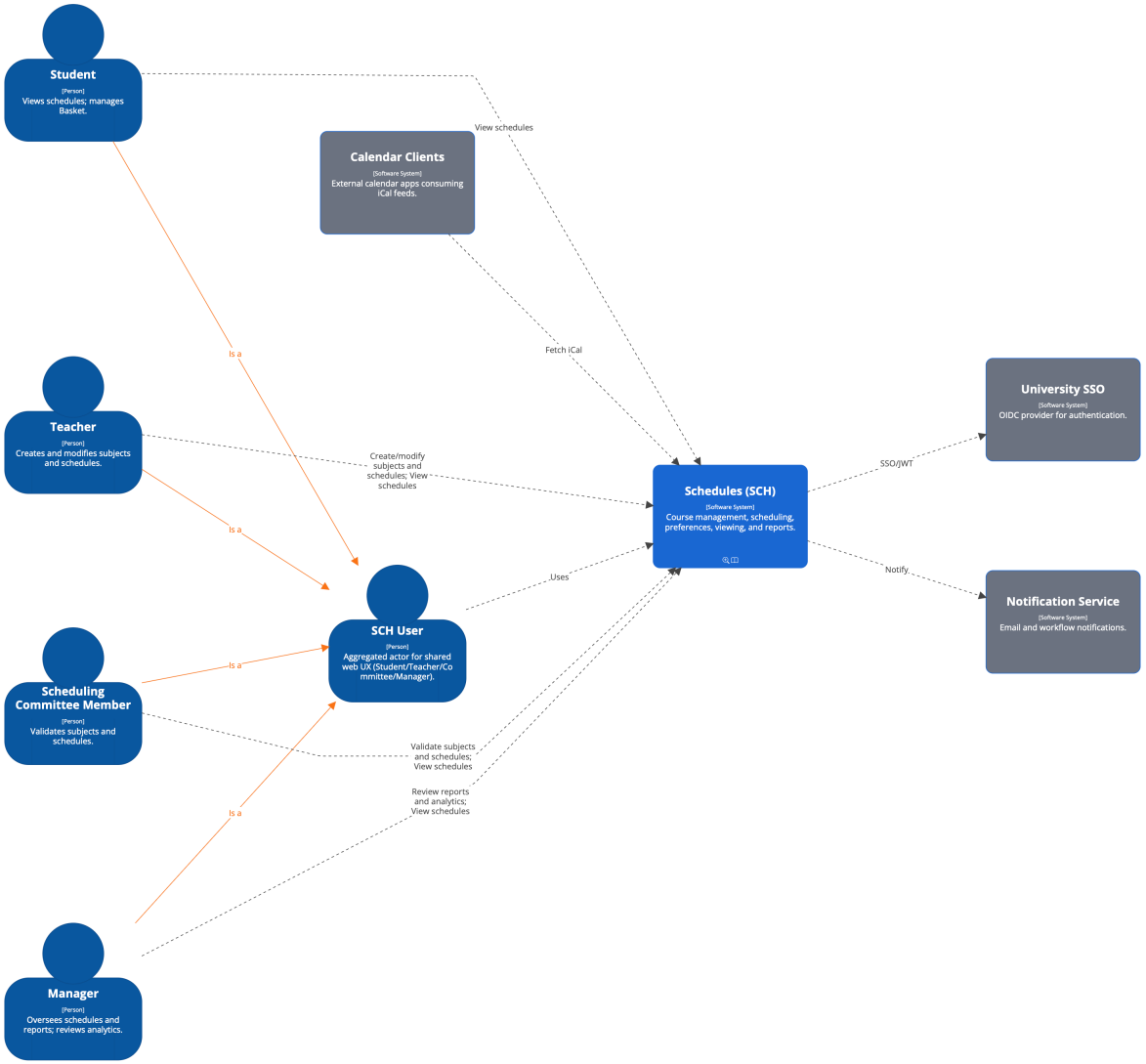
Everyone

Statistical reporting

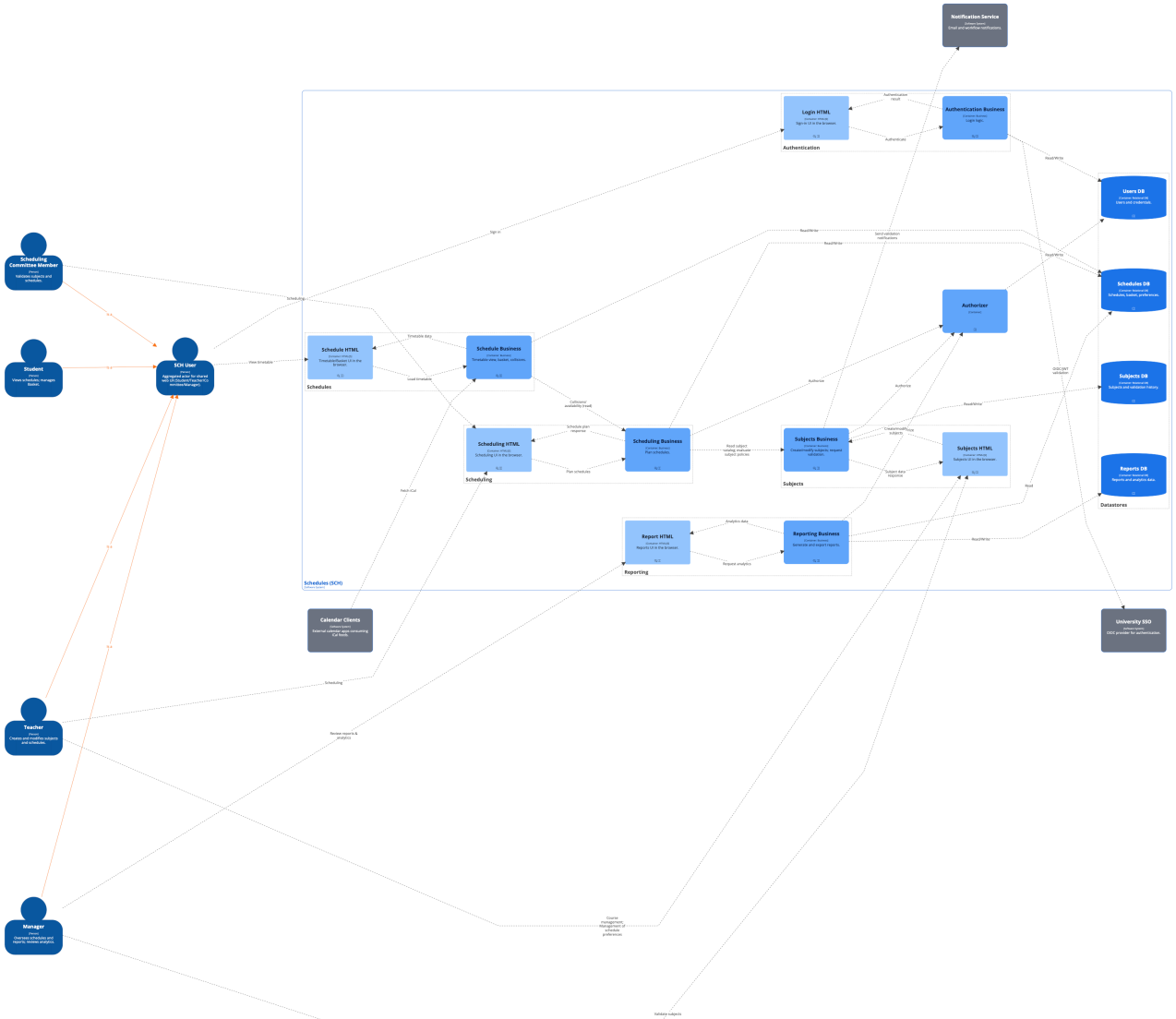


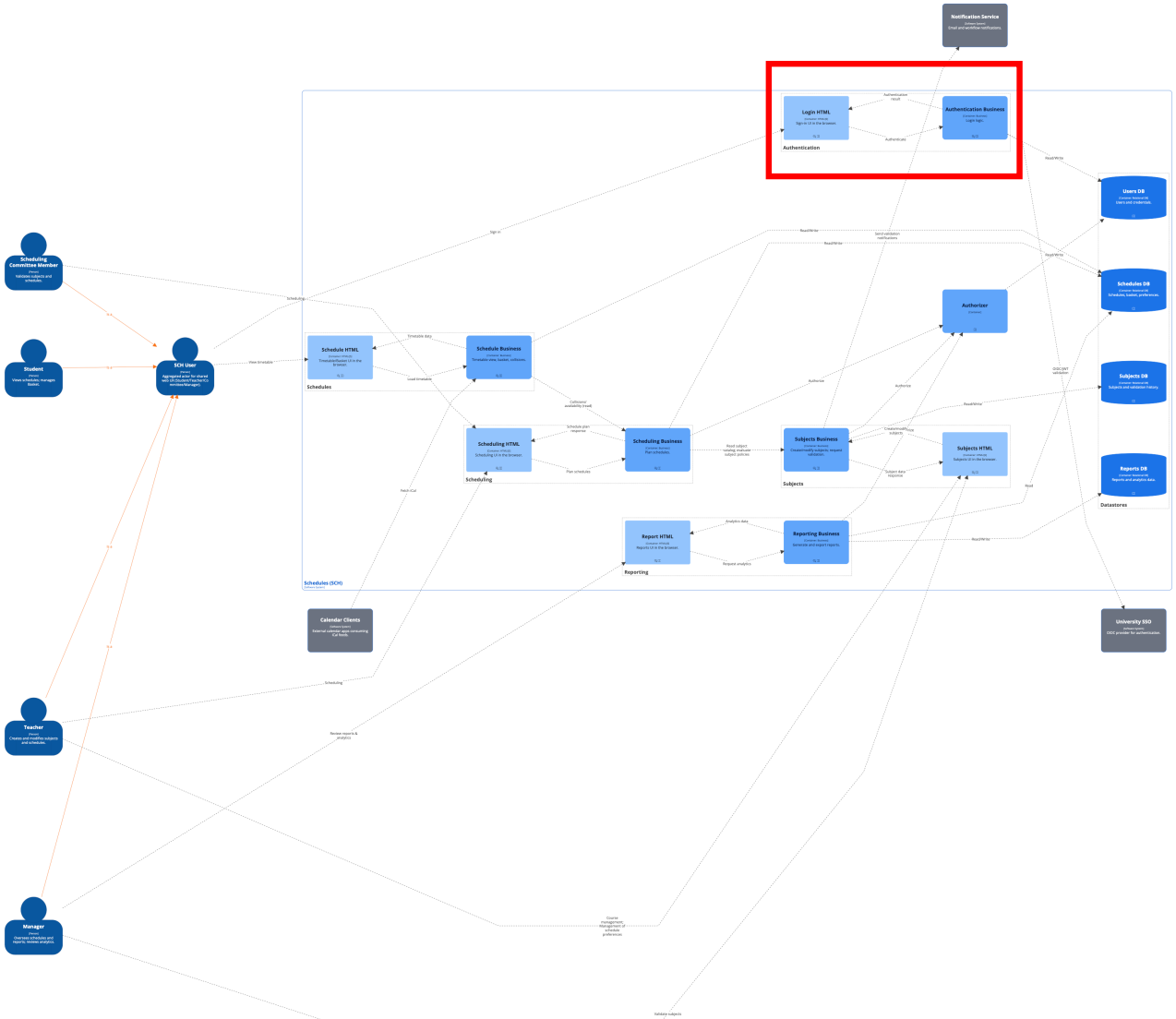

1 2 3
4 5 6
7 8 9
* 0 #

Faustus, Turčan

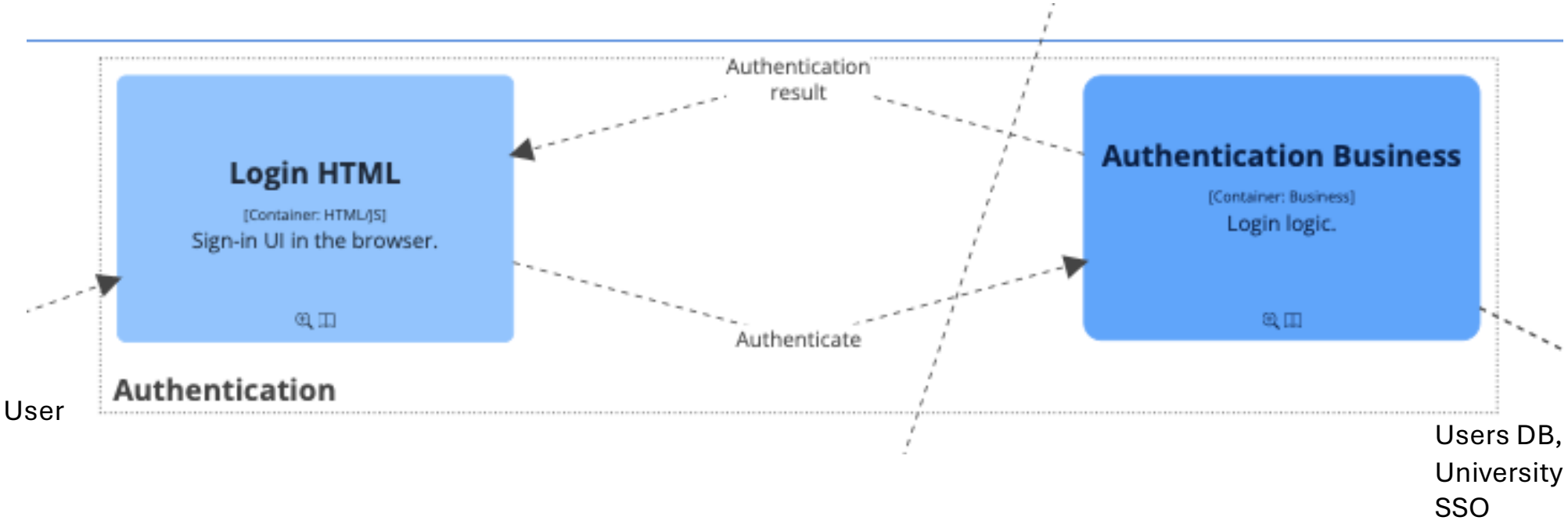


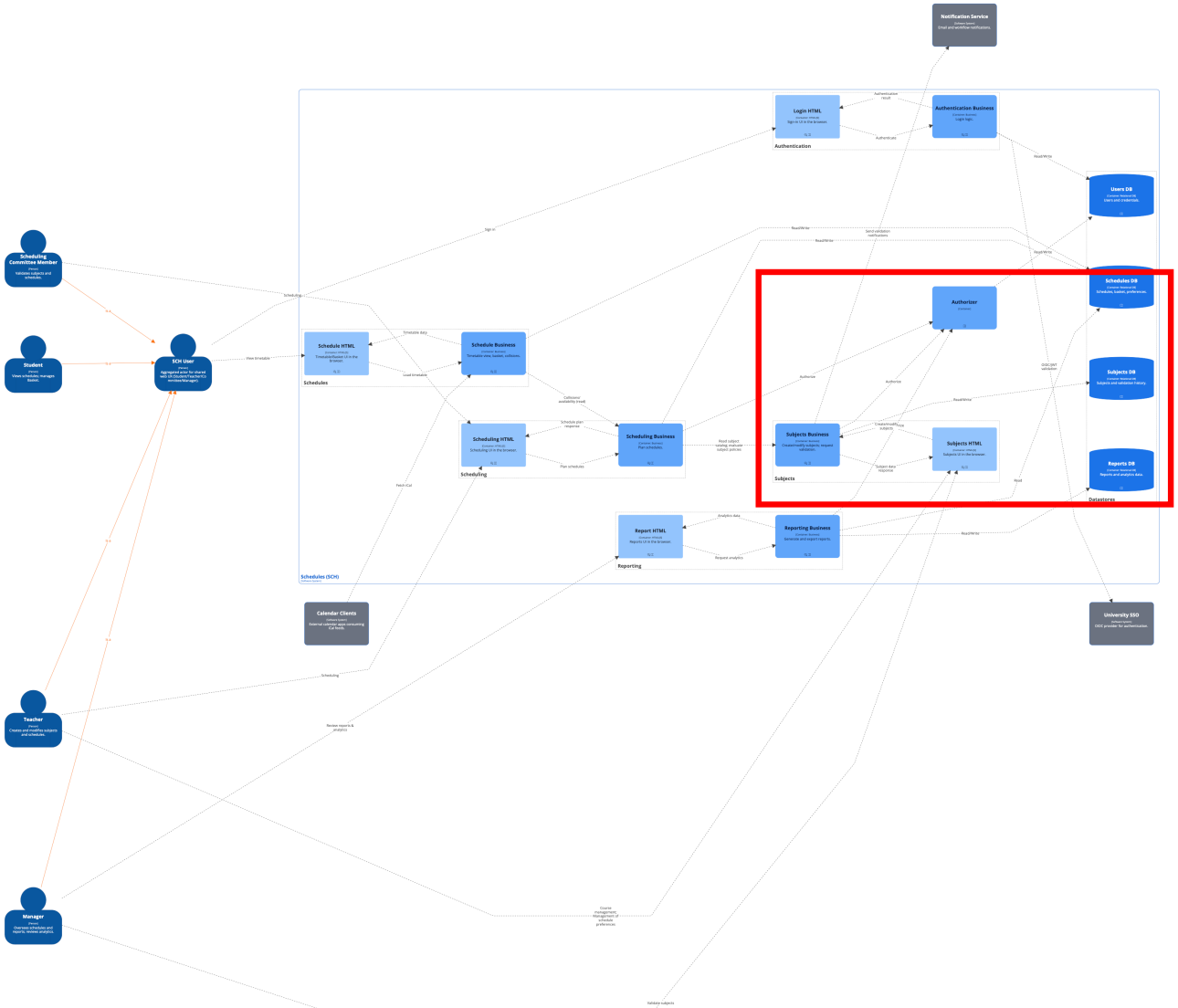
Turčan, Faustus



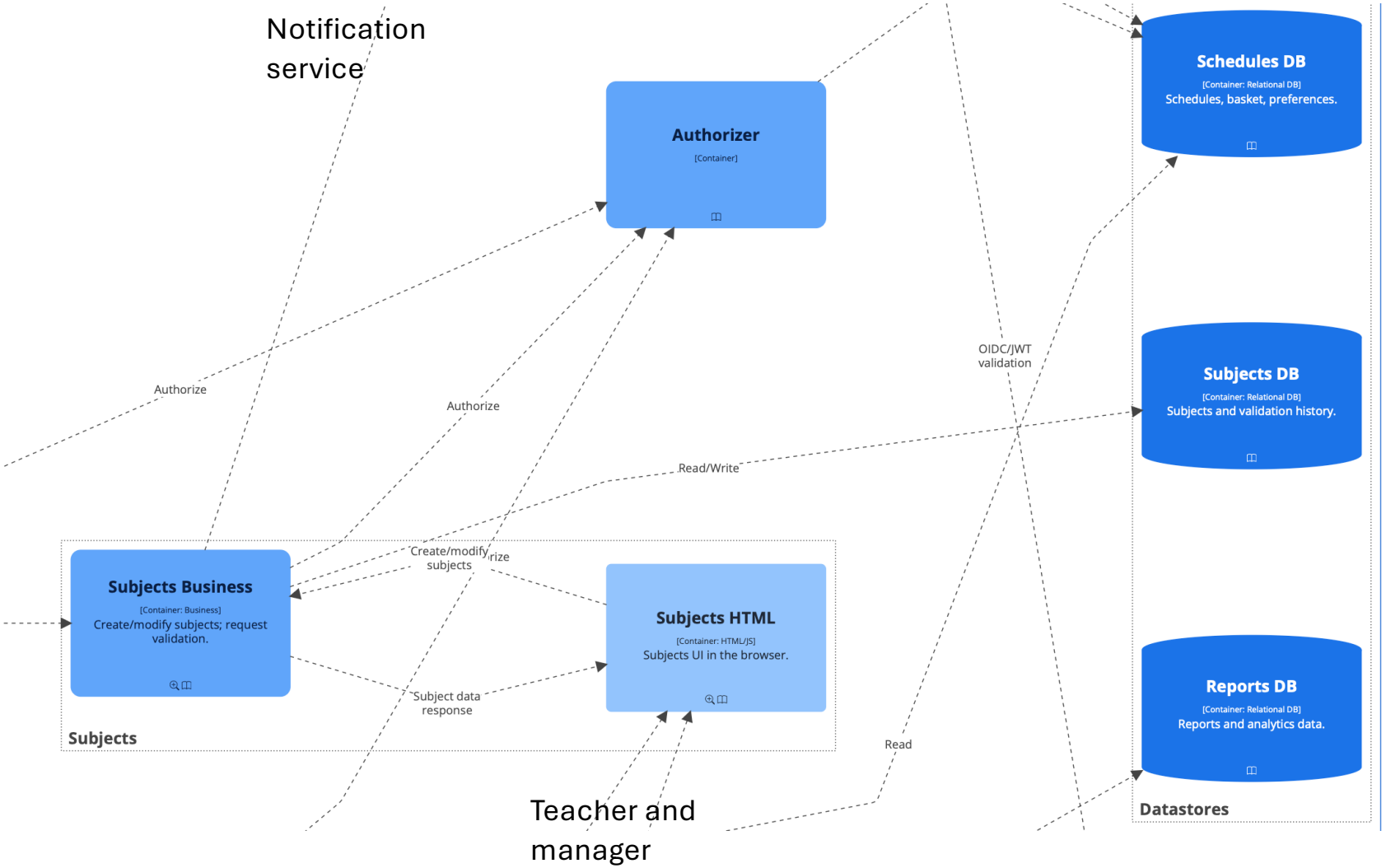


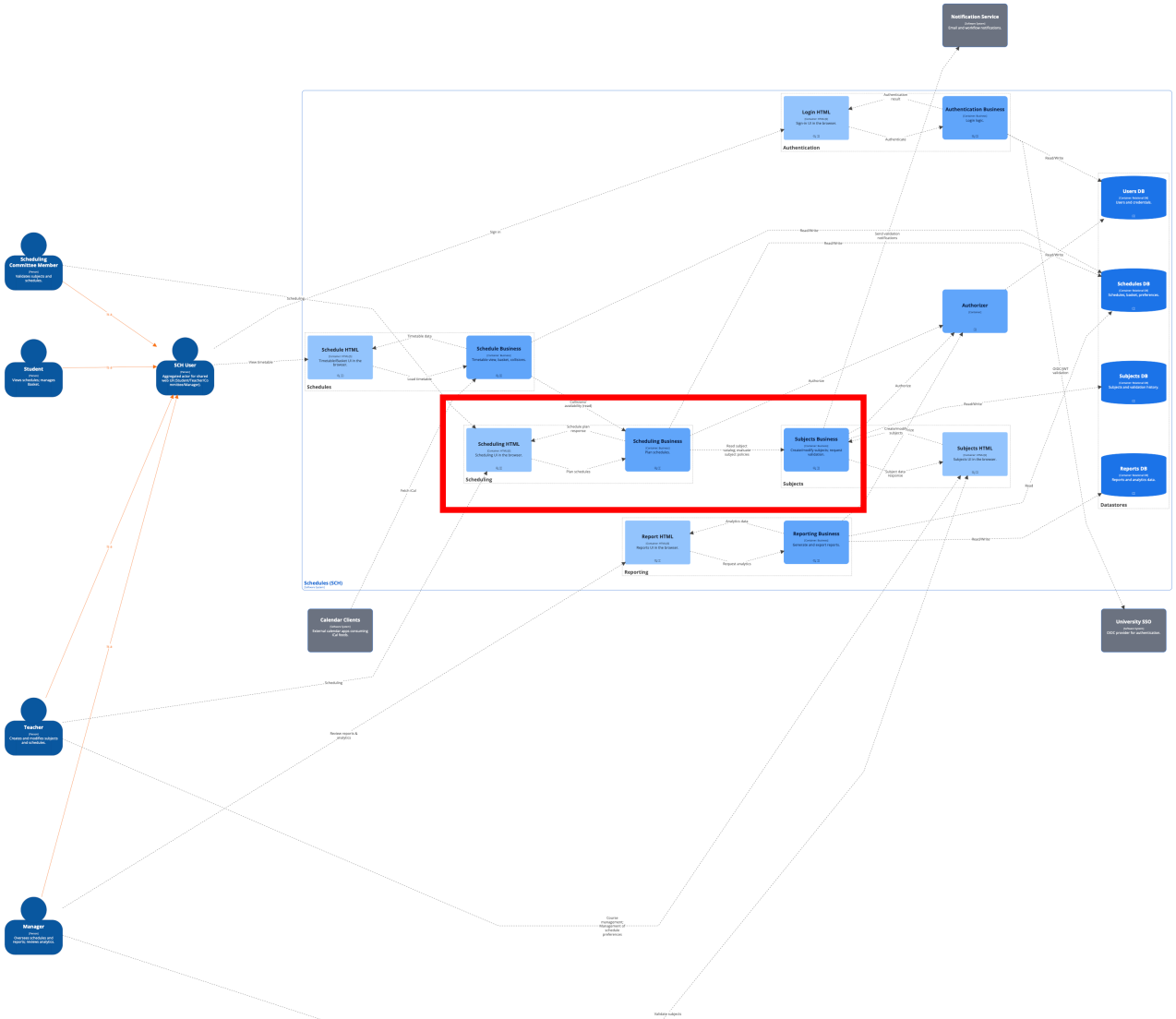
Notification Service
Email and workflow notifications.
Login HTML
Authentication
Authentication Business
Authentication result
Authenticate
Users DB
Users and credentials.
Schedules DB
Schedules, tasks, preferences.
Authorizer
Subjects DB
Subjects and validation history.
Reports DB
Reports and analytics data.
Datastores
Scheduling Committee Member
Student
SCH User
Schedule HTML
Schedules
Schedule Business
Schedulingg HTML
Scheduling
Scheduling Business
Subjects Business
Subjects
Subjects HTML
Report HTML
Reporting
Reporting Business
Calendar Clients
University SSO
Teacher
Manager
Schedules (SCH)


Authentication result
Login HTML
[Container: HTML/JS]
Sign-in UI in the browser.
Authentication Business
[Container: Business]
Login logic.
Authenticate
Authentication
User
Users DB, University SSO

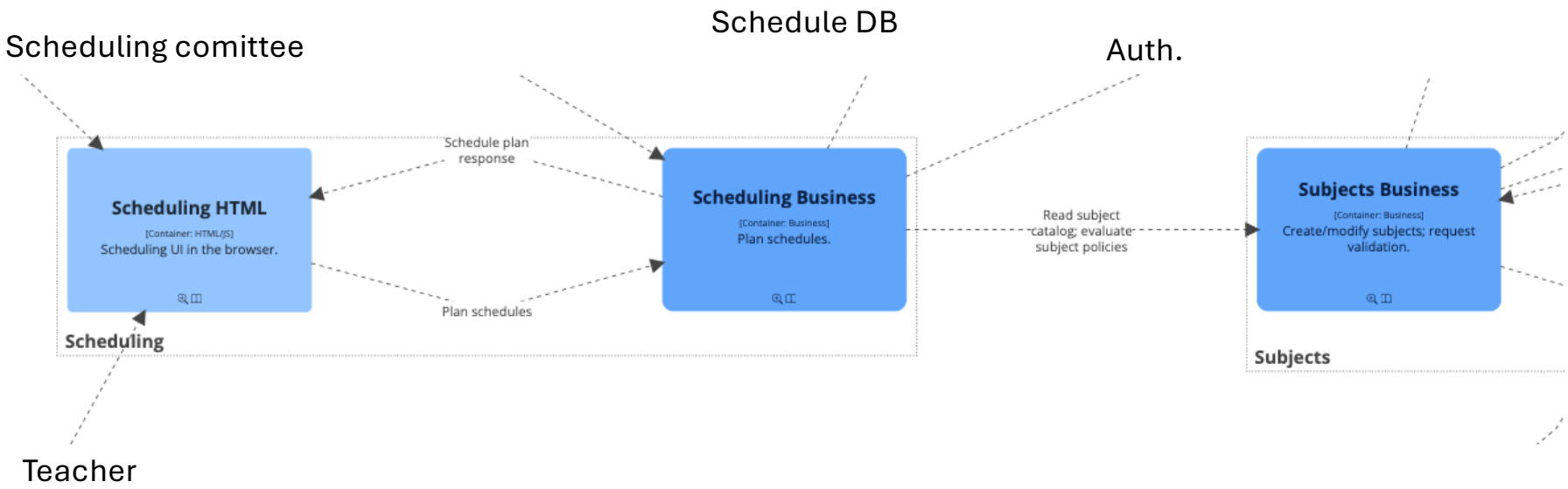


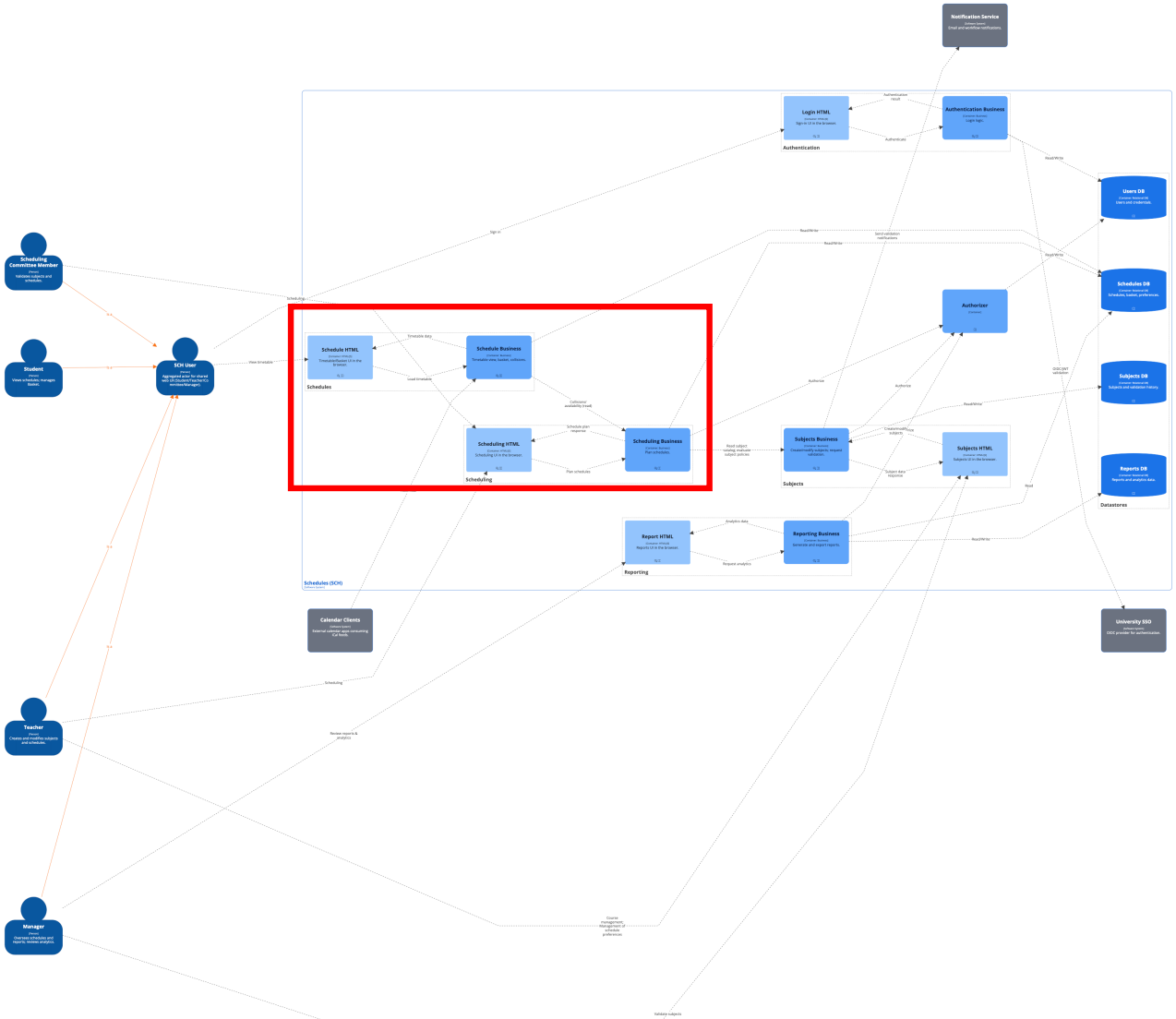
Notification Service
Sends Notifications
Email and workflow notifications.
Login HTML
Sign in UI in the browser.
Authentication
Authentication Business
Authenticate
Authentication result
Authenticate
Users DB
Users and credentials.
Schedules DB
Schedules, tasks, preferences.
Authorizer
Subjects DB
Subjects and validation history.
Reports DB
Reports and analytics data.
Datastores
Subjects Business
Create/modify subjects, request validation.
Subjects
Subjects HTML
Subjects UI in the browser.
Report HTML
Reports UI in the browser.
Reporting
Reporting Business
Generate and export reports.
Schedule HTML
Timetable/Master UI in the browser.
Schedules
Schedule Business
Timetable view, tasks, collision.
Scheduling HTML
Scheduling UI in the browser.
Scheduling
Scheduling Business
Plan schedules.
Schedules (SCH)
Calendar Clients
External calendar clients consuming Cal feeds.
University SSO
OSIC provider for authentication.
Scheduling Committee Member
Student
SCH User
Teacher
Manager
Sign in
Scheduling
View timetable
Timetable data
Load timetable
Collision/ availability trend
Schedule plan response
Plan schedules
Fetch iCal
Read subject totaling, evaluate subject policies
Authorize
Authorize
Authorize
Read/Write
Read/Write
Read/Write
Read/Write
Read/Write
Send validation notifications
Create/modify subjects
Subject data response
Read
Analytics data
Request analytics
Read/Write
Scheduling
Review reports & analytics
Create management of schedule preferences
Validate subjects


Notification service
Authorizer
[Container]
Schedules DB
[Container: Relational DB]
Schedules, basket, preferences.
Subjects DB
[Container: Relational DB]
Subjects and validation history.
Reports DB
[Container: Relational DB]
Reports and analytics data.
Datastores
Authorize
Authorize
OIDC/JWT validation
Read/Write
Create/modify subjects
rize
Subjects Business
[Container: Business]
Create/modify subjects; request validation.
Subjects HTML
[Container: HTML/JS]
Subjects UI in the browser.
Subject data response
Subjects
Read
Teacher and manager

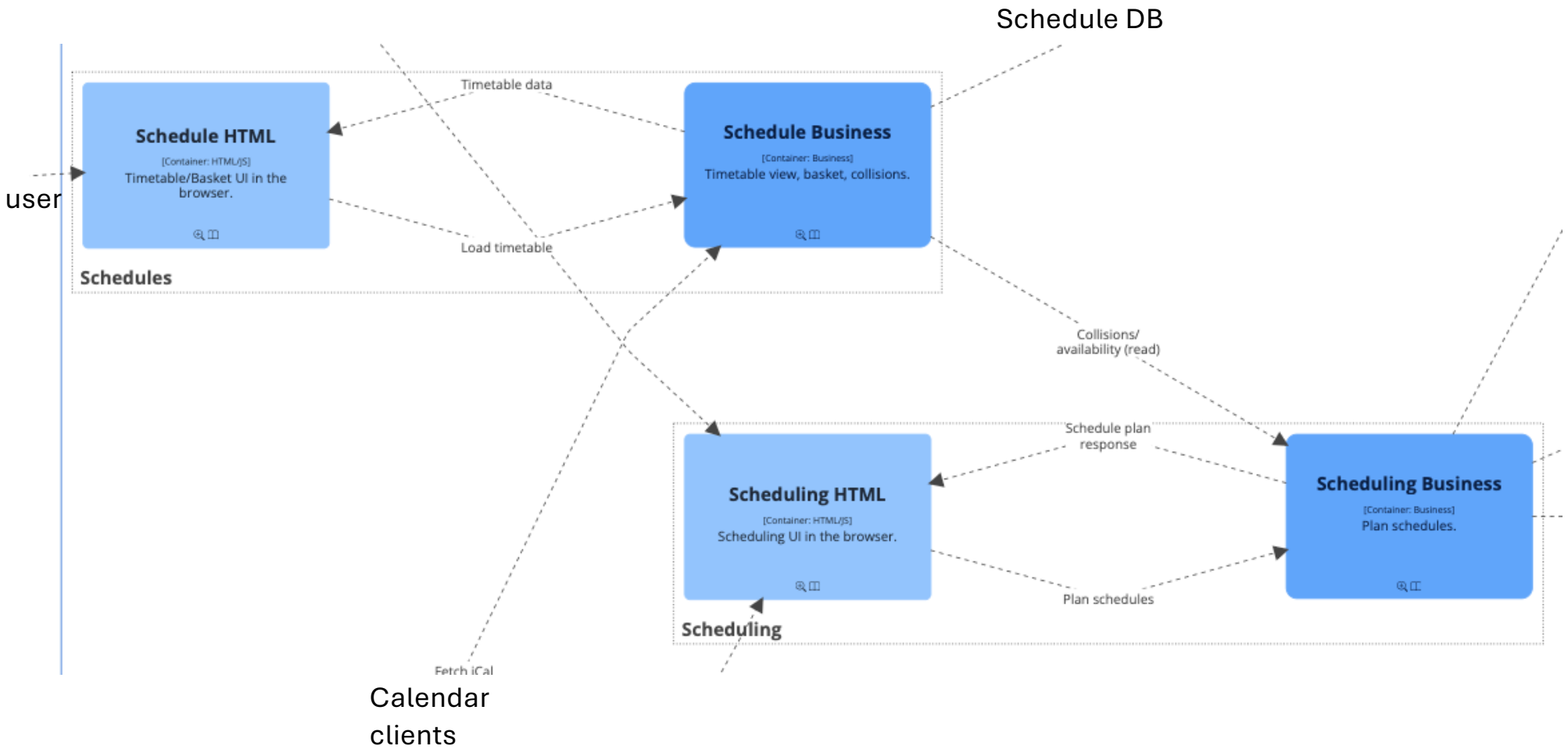


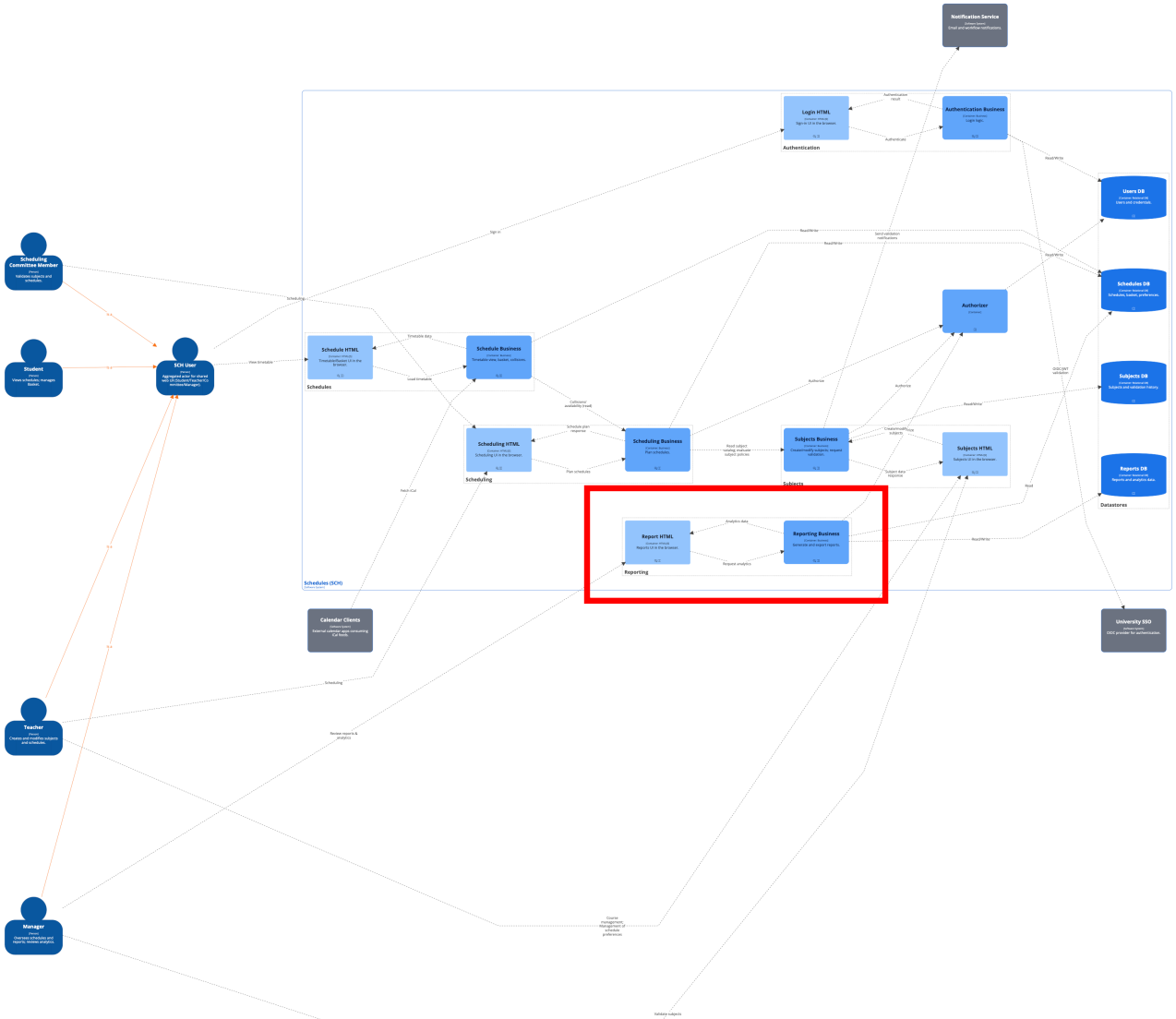
Notification Service
Email and workflow notifications.
Login HTML
Sign-in UI in the browser.
Authentication
Authentication Business
Login logic.
Authentication result
Authenticate
Sign in
Read/Write
Users DB
Users and credentials.
Send validation notifications
Schedules DB
Schedules, buddies, preferences.
Authorizer
Authorize
Subjects DB
Subjects and validation history.
Reports DB
Reports and analytics data.
Datastores
Scheduling Committee Member
Student
SCH User
Aggregated actor for shared web UI (Student/Teacher/Scheduling Manager)
View timetable
Schedule HTML
Timetable/Buddies UI in the browser.
Schedules
Timetable data
Load timetable
Schedule Business
Timetable view, buddies, collisions.
Scheduling HTML
Scheduling UI in the browser.
Scheduling
Schedule plan response
Plan schedules
Scheduling Business
Plan schedules.
Read subject catalog, evaluate subject policies
Subjects Business
Create/modify subjects, request validation.
Subjects
Create/modify subjects
Subject data response
Subjects HTML
Subjects UI in the browser.
Read
Fetch iCal
Report HTML
Reports UI in the browser.
Reporting
Analytics data
Request analytics
Reporting Business
Generate and export reports.
Calendar Clients
External calendar apps consuming iCal feeds.
University SSO
OIDC provider for authentication.
Teacher
Manager
Scheduling
Review reports & analytics
Course management of schedule preferences
Validate subjects


Scheduling comittee
Schedule DB
Auth.
Schedule plan response
Scheduling HTML
[Container: HTML/JS]
Scheduling UI in the browser.
Scheduling Business
[Container: Business]
Plan schedules.
Read subject catalog; evaluate subject policies
Subjects Business
[Container: Business]
Create/modify subjects; request validation.
Plan schedules
Scheduling
Subjects
Teacher

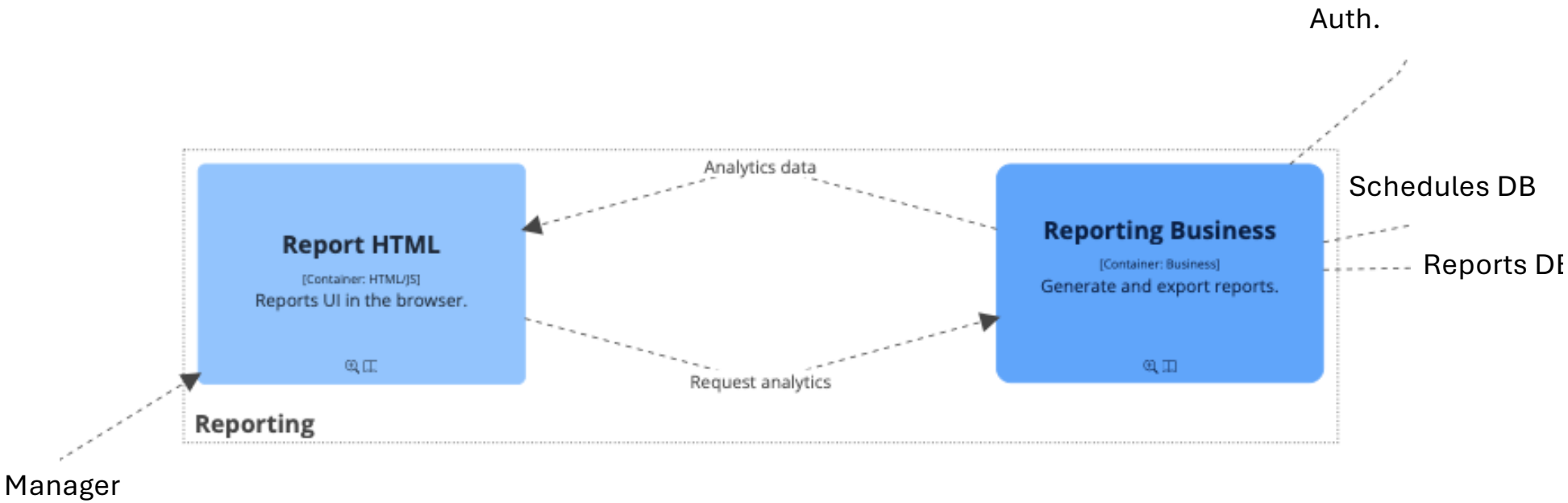


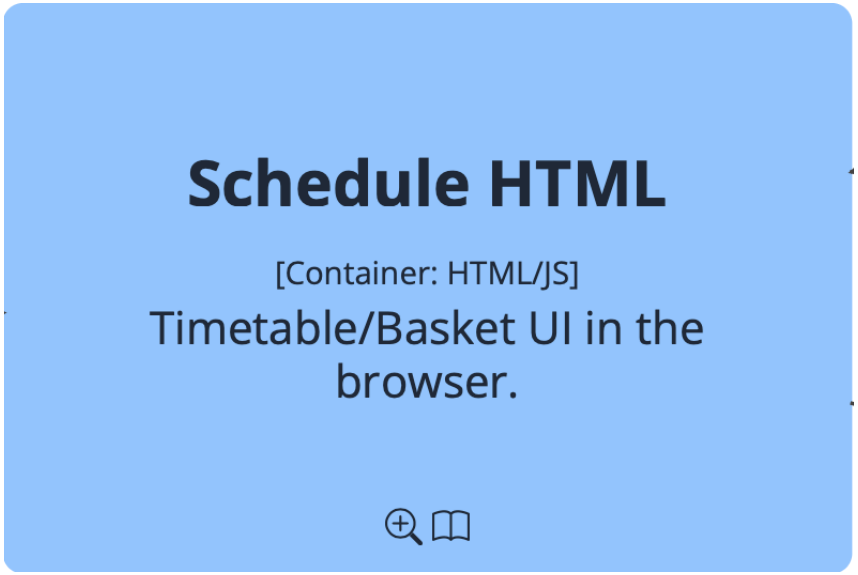
Notification Service
Sends Email
Email and workflow notifications.
Login HTML
Sign in UI in the browser.
Authentication
Authentication Business
Authenticate
Authentication result
Users DB
Schedules DB
Subjects DB
Reports DB
Datastores
Authorizer
Authorize
Subjects Business
Subjects
Subjects HTML
Subjects data response
Report HTML
Reporting
Reporting Business
Analytics data
Request analytics
Schedule HTML
Schedules
Schedule Business
Schedule plan response
Plan schedules
Scheduling HTML
Scheduling
Scheduling Business
Scheduling
Scheduling Committee Member
Student
SCH User
Teacher
Manager
Calendar Clients
University SSO
Schedules (SCH)

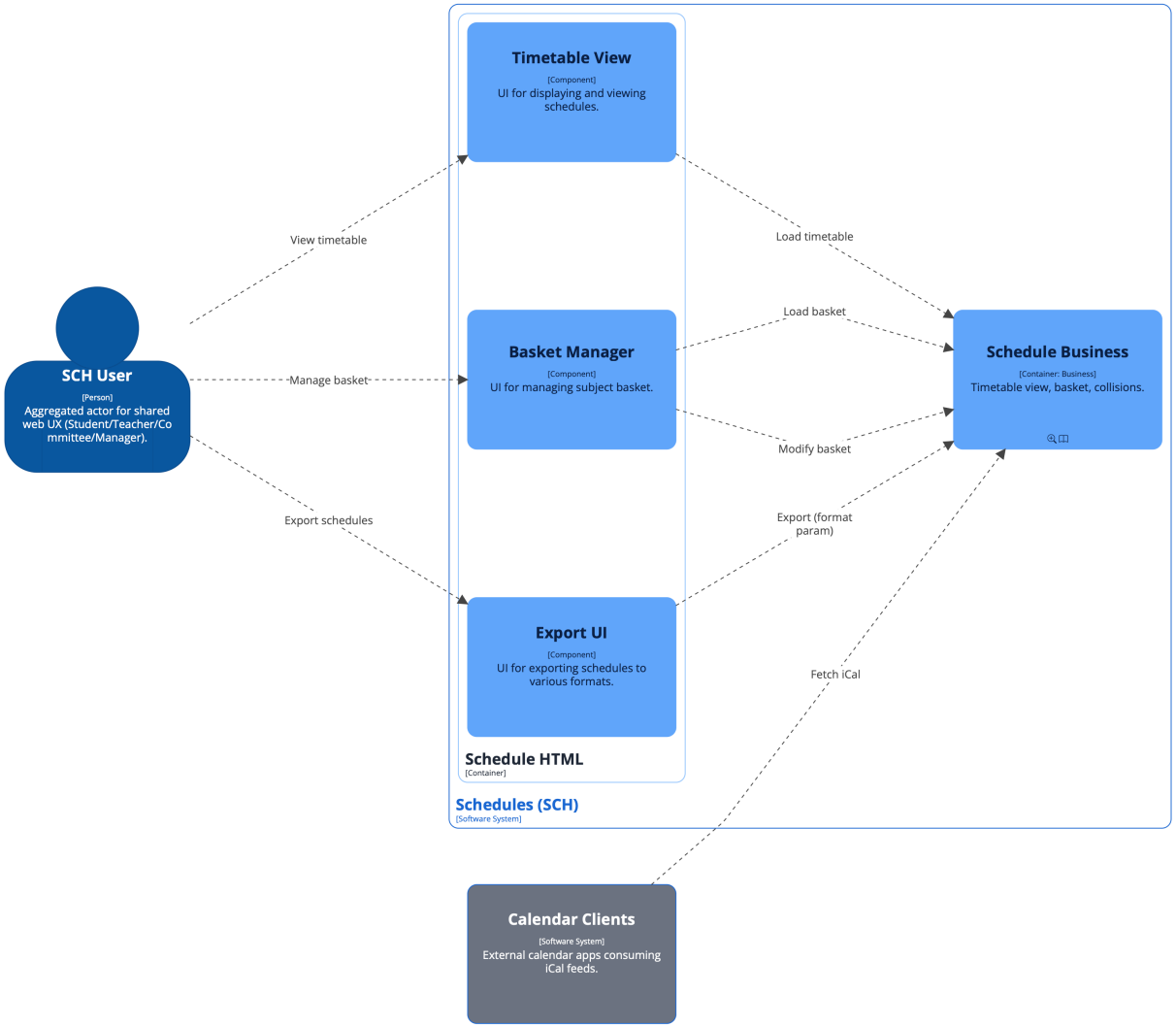

Schedule DB
Timetable data
Schedule HTML
[Container: HTML/JS]
Timetable/Basket UI in the browser.
Schedule Business
[Container: Business]
Timetable view, basket, collisions.
user
Load timetable
Schedules
Collisions/
availability (read)
Schedule plan
response
Scheduling HTML
[Container: HTML/JS]
Scheduling UI in the browser.
Scheduling Business
[Container: Business]
Plan schedules.
Plan schedules
Scheduling
Fetch iCal
Calendar
clients

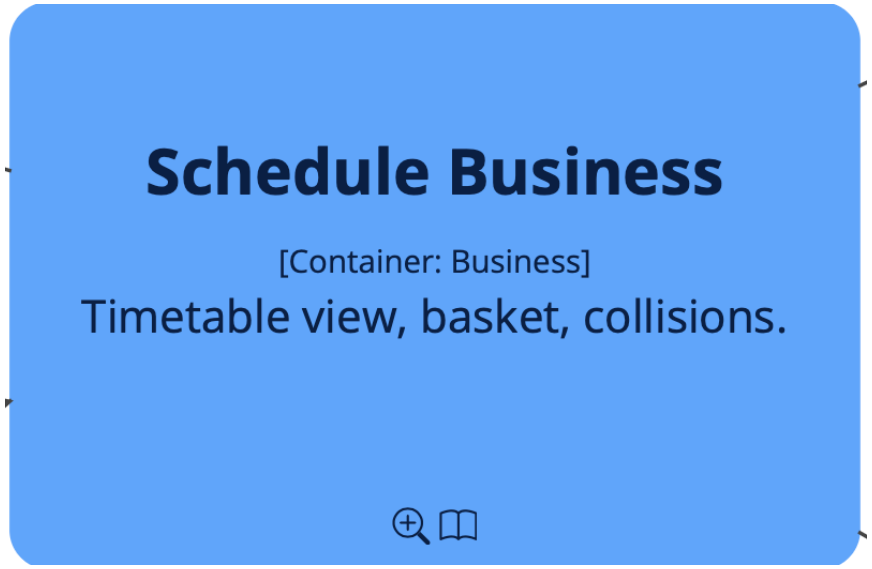


Notification Service
Sends Email
Email and workflow notifications.
Login HTML
Sign in UI in the browser.
Authentication
Authentication Business
Authenticate
Authentication result
Users DB
Users and credentials.
Schedules DB
Schedules, tasks, preferences.
Authorizer
Subjects DB
Subjects and validation history.
Reports DB
Reports and analytics data.
Datastores
Scheduling Committee Member
Validates subjects and schedules.
Student
Views schedules, manages tasks.
SCH User
Aggregated actor for shared web UI (Student/Teacher/Committee Manager)
Schedule HTML
Timetable/Master UI in the browser.
Schedules
Schedule Business
Timetable view, tasks, collision.
Scheduling HTML
Scheduling UI in the browser.
Scheduling
Scheduling Business
Plan schedules.
Subjects Business
Create/modify subjects, request validation.
Subjects
Subjects HTML
Subjects UI in the browser.
Report HTML
Reports UI in the browser.
Reporting
Reporting Business
Generate and export reports.
Schedules (SCH)
Calendar Clients
External Client
External calendar apps consuming Cal feeds.
University SSO
OSSO provider for authentication.
Teacher
Creates and modifies subjects and schedules.
Manager
Oversees schedules and reports; reviews analytics.
Sign in
Scheduling
View timetable
Timetable data
Load timetable
Collisions/ availability (read)
Schedule plan response
Plan schedules
Fetch iCal
Read subject catalog, evaluate subject policies
Authorize
Authorize
Authorize
Subject data response
Create/modify subjects
Subject data response
Read/Write
Read/Write
Read/Write
Read/Write
Read/Write
Read
Analytics data
Request analytics
Scheduling
Review reports & analytics
Course management, management of schedule preferences
Validate subjects

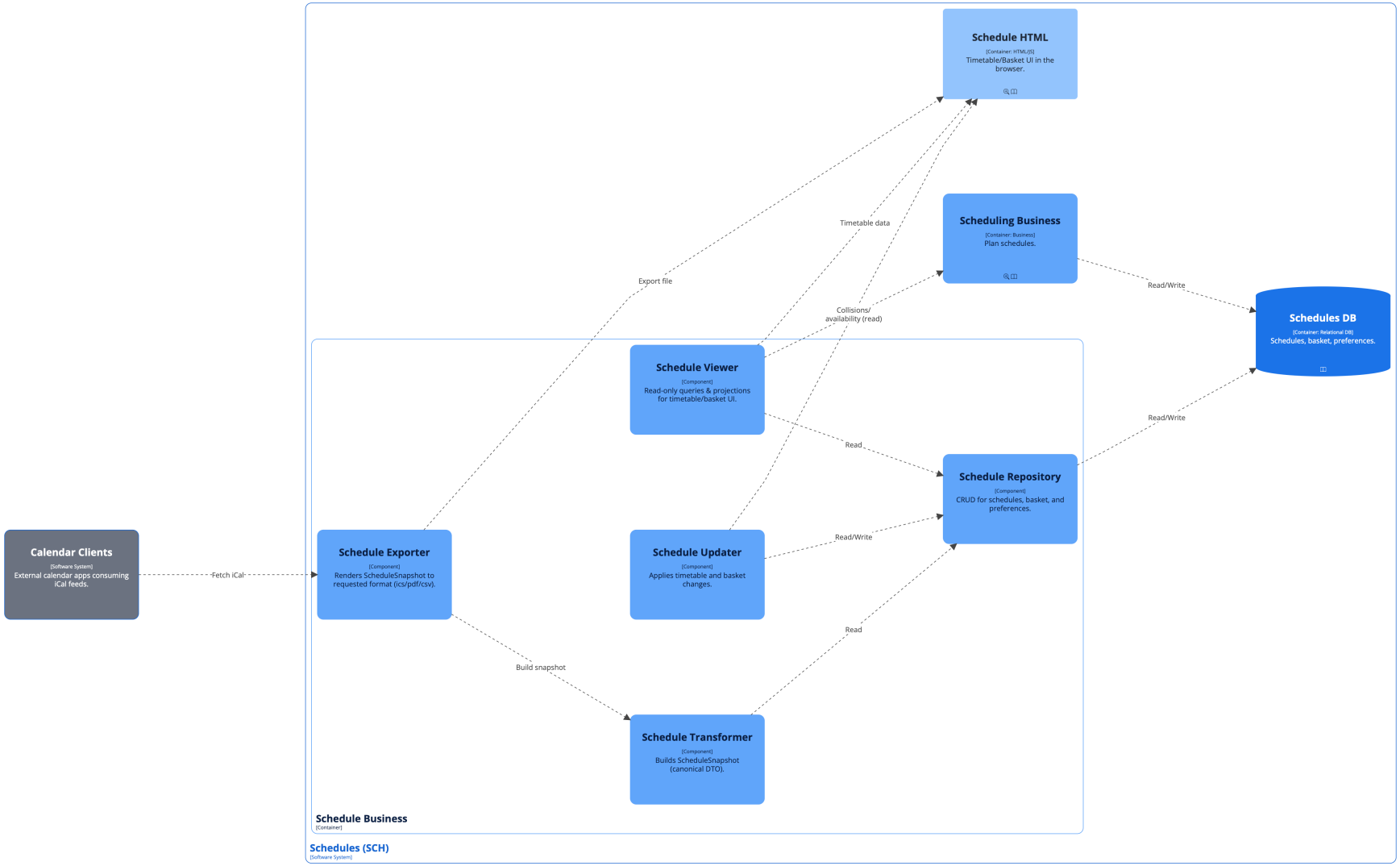

Auth.
Schedules DB
Reports DB
Analytics data
Report HTML
[Container: HTML/JS]
Reports UI in the browser.
Reporting Business
[Container: Business]
Generate and export reports.
Request analytics
Reporting
Manager


Schedule HTML
[Container: HTML/JS]
Timetable/Basket UI in the browser.


Timetable View
[Component]
UI for displaying and viewing schedules.
Basket Manager
[Component]
UI for managing subject basket.
Export UI
[Component]
UI for exporting schedules to various formats.
Schedule HTML
[Container]
Schedules (SCH)
[Software System]
Schedule Business
[Container: Business]
Timetable view, basket, collisions.
SCH User
[Person]
Aggregated actor for shared web UX (Student/Teacher/Committee/Manager).
Calendar Clients
[Software System]
External calendar apps consuming iCal feeds.
View timetable
Manage basket
Export schedules
Load timetable
Load basket
Modify basket
Export (format param)
Fetch iCal

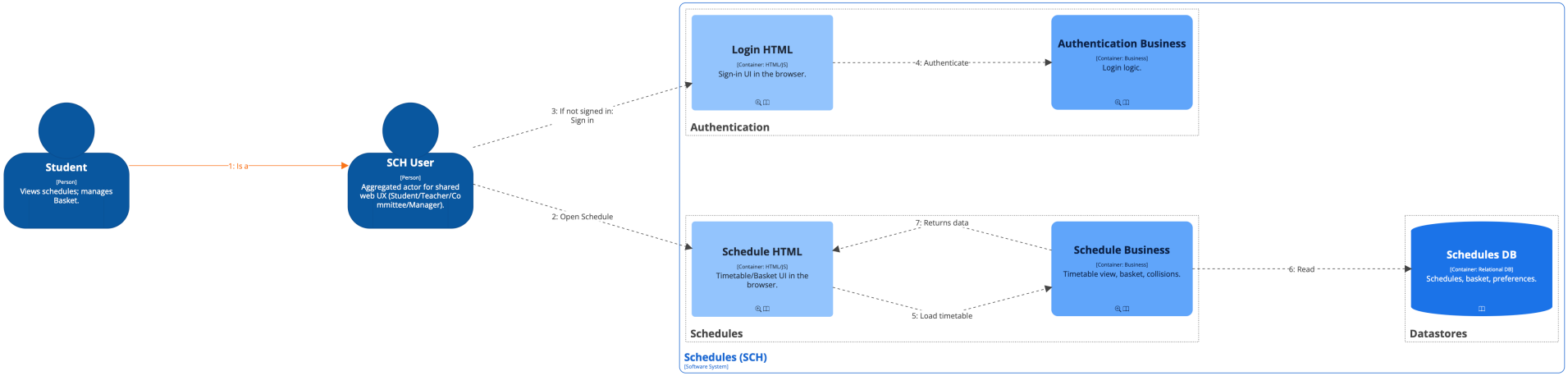

Schedule Business
[Container: Business]
Timetable view, basket, collisions.

Faustus, Turčan, Toma



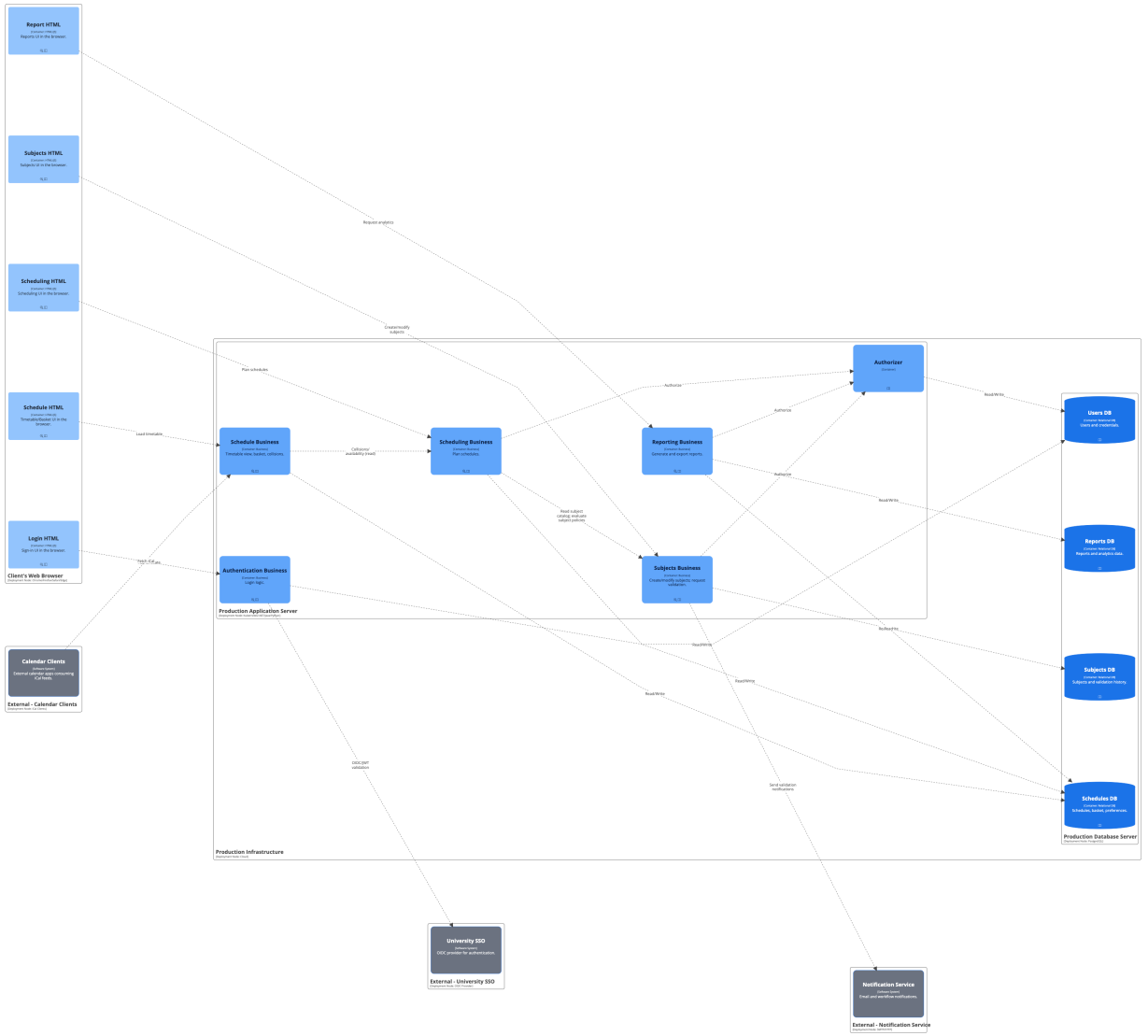
Dynamic diagram - View schedules (Student)

Toma

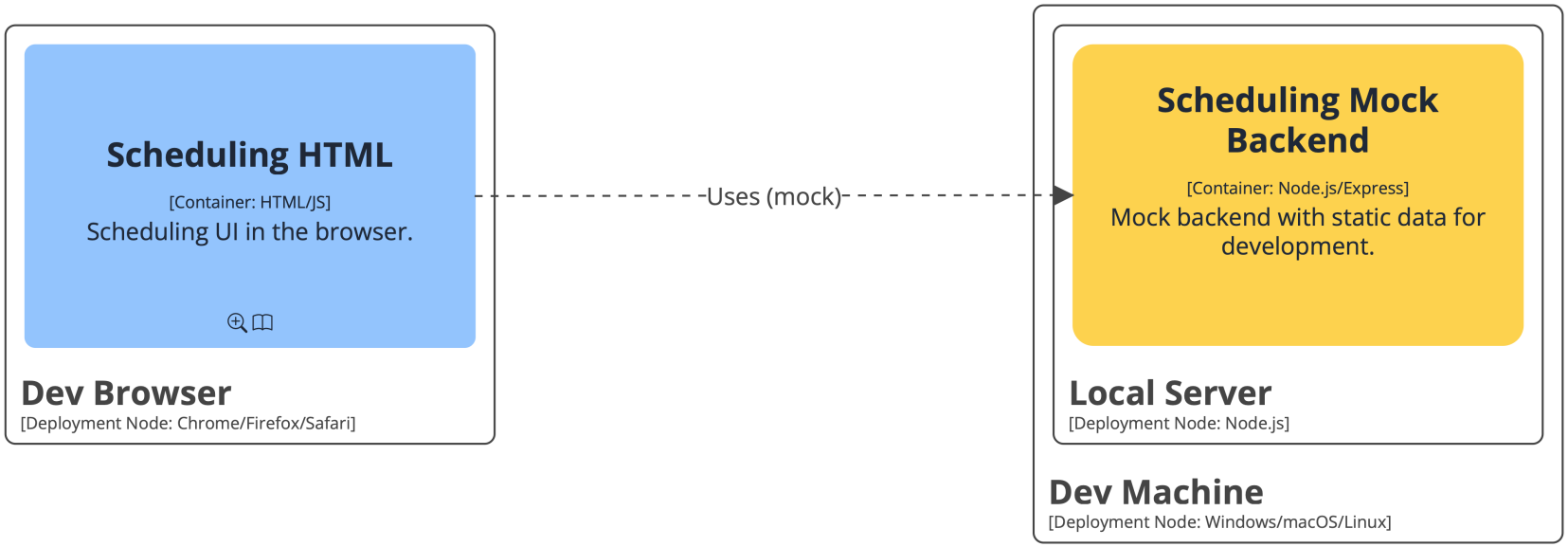

Student
[Person]
Views schedules; manages Basket.
1: Is a
SCH User
[Person]
Aggregated actor for shared web UX (Student/Teacher/Committee/Manager).
3: If not signed in: Sign in
2: Open Schedule
Login HTML
[Container: HTML/JS]
Sign-in UI in the browser.
4: Authenticate
Authentication Business
[Container: Business]
Login logic.
Authentication
Schedule HTML
[Container: HTML/JS]
Timetable/Basket UI in the browser.
7: Returns data
5: Load timetable
Schedule Business
[Container: Business]
Timetable view, basket, collisions.
6: Read
Schedules DB
[Container: Relational DB]
Schedules, basket, preferences.
Schedules
Datastores
Schedules (SCH)
[Software System]

Deployment diagrams

Toma, Helmich



Helmich, Toma, Faustus



Questions?