

**Software Engineering for Business Applications -  
Master's Course: Web Application Engineering  
(IN2087)**

**Assignment 2**



**GYM VAULT**

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(Software Engineering for Business Information Systems)***

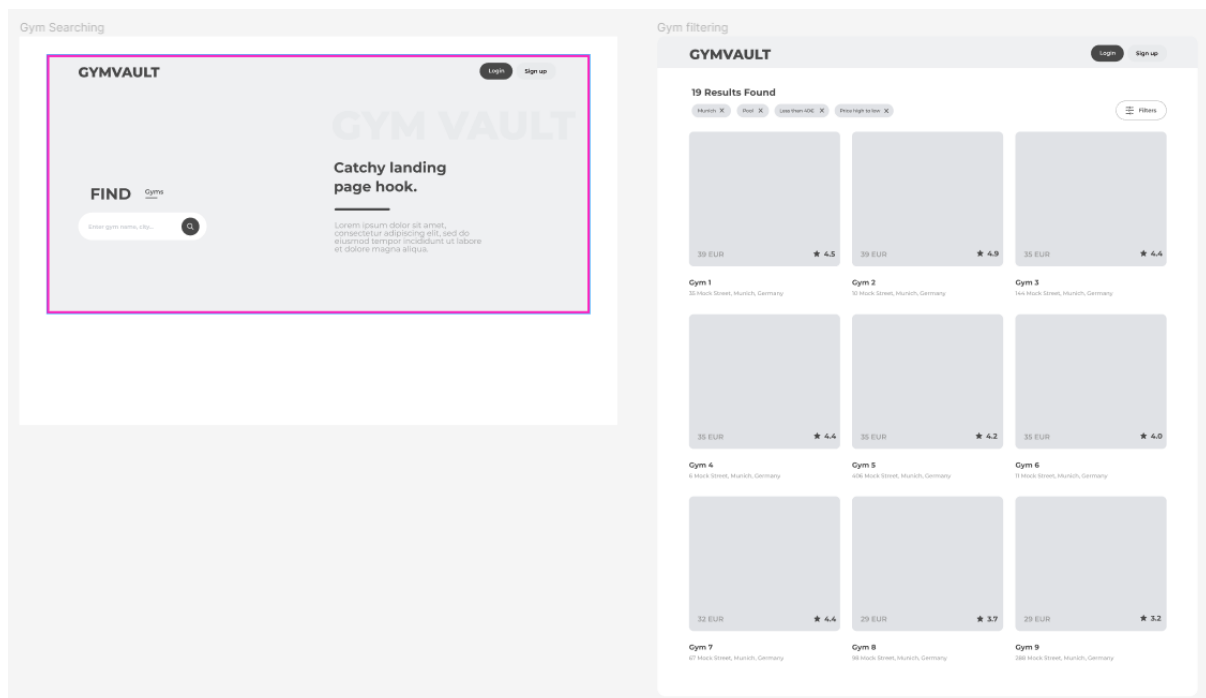
# Use Cases

## *Use Case 1 : Gym Searching and Filtering*

When the user enters the website, the first feature that is available to them is a search bar to look for gyms. The user can click on the search bar and type in the name of a city or the name of a gym. The search bar is an autocomplete component which can help narrow down the choices. After typing their search query, a drop down appears and displays a maximum of 5 of the most relevant results.

When the user selects an item in the dropdown, he is redirected to the filtering page. At the top of this page, the user can see the number of results that matched their query. The search results are displayed in rows, with each row containing 3 cards. There are at most 3 rows displayed at a time, and the user can see the next row by scrolling to the bottom. Each card contains the name of the gym, the address, the thumbnail, the price of a monthly subscription and the user reviews.

At the top right of the page is a filters button which the user can use if they want to filter the results. When the user clicks that button, a modal pops up with the following filters with each filter on its own row: price low to high (checkbox), subscription types (radio buttons) and amenities and equipment (checkboxes). When the user makes their selection, the active filters are displayed at the top of the page and can be cleared using the clear (X) icon.



## Use Case 2: Booking, Checkout and Subscription Management

From the filtering page, courses and buying options are shown. The user selects one of these (course or subscription) and a page with customizations for such options, a summary of options, the total pricing, and the terms & conditions is shown.

An agreement is done if necessary to pass the full name, email and phone to the gym. From here, the user is directed to their summary page (showing a confirmation on top) for their current & past subscriptions. The ticket code that they can use to access the gym is also displayed and the checkout is then performed via Stripe. Finally, clicking on one subscription from the list reveals once again its summary, and shows the secret code required to access the gym and both past and current memberships are shown under the personal summary page.

GYMVAULT

My Tickets



course

### ZHS Hochschulsport

Connollystraße 32, Munich

28€

Basic Ticket

Includes registration,  
max. 4 entrances/week

99€

VIP Ticket

24h entry (auto scan),  
premium equipment

#### Optionals

16€

Equipment Rental

Rent mat and accessories  
during course sessions

free

Special Needs

Require assistance for  
disability

### Yoga for Beginners

A basic course varying over Hatha Yoga, and meditation practices. Unlike the more static and strengthening Hatha yoga style, a Vinyasa class is very dynamic.

The physical exercises, the so-called asanas, are not practised individually, but are strung together in flowing movements.

#### Your Order

€ 99 VIP Ticket

€ 16 Equipment Rental

€ 115 Total due

Secure Checkout

stripe

**Your booking was successful.**  
Below you can see your subscription. Click on it to copy your access identifier, and print the tickets if needed:

**ZHS Hochschulsport**  
Connollystraße 32, Munich

**16€**  
Equipment Rental  
Rent mat and accessories during course sessions

**99€**  
VIP Ticket  
24h entry (auto scan), premium equipment

Starts **12.02.2022**  
Ends **12.12.2022**

**€ 115** Total paid

**course**

**Yoga for Beginners**  

A basic course varying over Hatha Yoga, and meditation practices. Unlike the more static and strengthening Hatha yoga style, a Vinyasa class is very dynamic.

The physical exercises, the so-called asanas, are not practised individually, but are strung together in flowing movements.

**ZHS Hochschulsport**  
Connollystraße 32, Munich

**16€**  
Equipment Rental  
Rent mat and accessories during course sessions

**1055 2045 3984 // Cat Stevens**  
1055 2045 3984 // Cat Stevens

Valid from **22.05.2022**  
Expires on **22.12.2022**

**€ 115** Total paid

**course**

**Yoga for Beginners**  

A basic course varying over Hatha Yoga, and meditation practices. Unlike the more static and strengthening Hatha yoga style, a Vinyasa class is very dynamic.

The physical exercises, the so-called asanas, are not practised individually, but are strung together in flowing movements.

**Boulder Welt Munich East**  
PLAZA, Hanne-Hiob-Straße 4, Munich

**365€**  
Bouldering + Climbing  
24h, all inclusive yearly ticket. Bring your own shoes!

**35€**  
Sauna Access  
Access to internal sauna. Bring your own beer :)

Starts **01.01.2022**  
Ends **31.12.2022**

**€ 400** Total paid

**pass**

**Rock Climbing**  

Yearly subscription to all BoulderWelt facilities, including both bouldering and all (manual or auto-belay) lead routes.

Expired Memberships

In memoriam

**Boulder Welt Munich East**  
PLAZA, Hanne-Hiob-Straße 4, Munich

**365€**  
Bouldering + Climbing  
24h, all inclusive yearly ticket. Bring your own shoes!

Started **01.01.2021**  
Ended **31.12.2021**

**€ 365** Total paid

**pass**

**Rock Climbing**  

Yearly subscription to all BoulderWelt facilities, including both bouldering and all (manual or auto-belay) lead routes.

### ***Use Case 3: Review and Feedback System***

Users can view the reviews for a particular course or fitness center. Customers who have paid for a subscription have the option of posting a review of a gym or course. The reviews can be found on the details page dedicated to a course or fitness center. Users with an active or expired subscription who wish to provide feedback on it can do so by browsing their home profile and submitting their insights there.

Users with a subscription can review a course or gym under userprofile -> Subscriptions -> write a review. Users without a subscription can see reviews for the course or gym on their respective details page.

## Expired Memberships

In memoriam

How was your experience?

x

## Boulder Welt

PLAZA, Hanne-Hiob-Straße 4, Mün

pass

submit

365€

Bouldering + Climbing

24h, all inclusive yearly ticket. Bring your own shoes!

## Rock Climbing

Yearly subscription to all BoulderWelt facilities, including both bouldering and all (manual or auto-belay) lead routes.

Rate this course



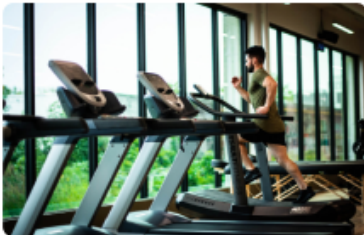
write a review

Started 01.01.2021  
Ended 31.12.2021

€ 365 Total paid

## Reviews - GYM

GYMVAULT



## The Olympian Gym

Welcome to the best fitness center in Cleveland

We offer most types of sports, group classes, and are open all week long for a truly premium fitness experience.

Buy Subscription

## Offered Courses:

Swimming Yoga Boxing Karate

Martial Arts

Aerobics

Pilates

CrossFit

## Reviews

★★★★★ 150 people reviewed this gym!

## Recent reviews

- Carter ★★★★★
- Isabela ★★★★★
- Diego ★★★★★
- Emilie ★★★★★

most positive

most recent

most critical

Isabela  
★★★★★

Loren ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse interdum diam. Donec egestas mauris ut libero.

RandomJoe  
★★★★★

Loren ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse interdum diam. Donec egestas mauris ut libero.

Carter  
★★★★★

Loren ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse interdum diam. Donec egestas mauris ut libero.

Emilie  
★★★★★

Loren ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse interdum diam. Donec egestas mauris ut libero.

## Reviews - Course

GYMVAULT



## Yoga for Beginners



Buy Course

## Reviews

★★★★★ 150 people reviewed this gym!

## Recent reviews

- Carter Welch ★★★★★
- Isabela Silveira ★★★★★
- Diego Curumim ★★★★★
- Emilie Goode ★★★★★



★★★★★

Loren ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse interdum diam. Donec egestas mauris ut libero.

★★★★★

Loren ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse interdum diam. Donec egestas mauris ut libero.

★★★★★

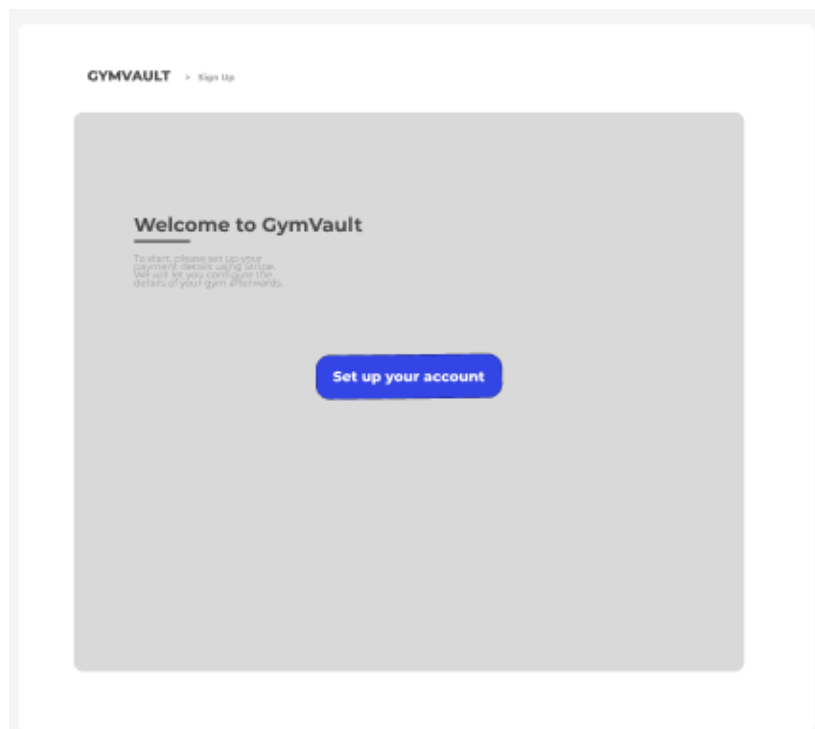
Loren ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse interdum diam. Donec egestas mauris ut libero.

★★★★★

Loren ipsum dolor sit amet, consectetur adipiscing elit. Suspendisse interdum diam. Donec egestas mauris ut libero.

### *Use Case 4 : Onboarding Gym Owners*

Gym owners receive credentials from GymVault's administrators and, if they had not done so yet, get prompted to onboard to Stripe Connect service by clicking on the "Set up your account" button. This launches Stripe Connect's onboarding form in an external tab and the owner fills in their personal and card details. This associates a Stripe Account ID with that owner and so the gym owner can now receive payments for subscriptions from GymVault's Stripe account. The gym owner is then redirected to enter their gym's details like amenities, courses and any additional information.

A screenshot of the Stripe Connect onboarding form for GymVault. The form is divided into two main sections. The left section, titled "stripe Connect", contains a GymVault logo and a progress bar with four steps. Below the progress bar are input fields for "Name", "Phone", and "Email", followed by a blue "Next" button. The right section, titled "GYMVAULT > Set gym details", contains several input fields and sections: "Gym name" and "Gym website" (text inputs); "Gym icon" and "Gym Pictures" (image upload buttons with red 'x' icons); "Add course" (a plus icon button); "Contact Person Details" (a section header followed by "name", "email", and "phone" text inputs); "Amenities" (a plus icon button); and "Fees" (a section header followed by three radio buttons: "1 month" (selected), "3 months", and "single sessions"). A blue "Submit" button is at the bottom right of the right section.

# UML Class Diagram

