

# **System Design Document**

Stackato Studio

Department of Computer Science, University of Toronto

CSCC01H3: Introduction to Software Engineering

Ilir Dema

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## CRC Cards

### User

<b>Class Name:</b> User
<b>Parent Class (if any):</b> - <b>Subclasses (if any):</b> Customer, Service Provider
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Knows email address</li><li>• Knows password</li><li>• Knows full name</li><li>• Knows government-issued ID</li><li>• Knows address</li><li>• Knows a rating (up to 5 stars)</li><li>• Able to login</li><li>• Able to register</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• Chat</li></ul>

### Customer

<b>Class Name:</b> Customer
<b>Parent Class (if any):</b> User <b>Subclasses (if any):</b> -
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Modifies address</li><li>• Modifies profile picture ***</li><li>• Knows past appointments</li><li>• Knows confirmed appointments</li><li>• Knows awaiting confirmation appointments</li><li>• Makes an appointment</li><li>• Cancels an appointment</li><li>• Makes a payment</li><li>• Makes a review</li><li>• Sees posts of service provider</li><li>• Chats with service provider</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• Appointment</li><li>• Payment</li><li>• Review</li></ul>

## Service Provider

<b>Class Name:</b> Service Provider
<b>Parent Class (if any):</b> User <b>Subclasses (if any):</b> -
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Knows types of services provided</li><li>• Knows profile picture</li><li>• Modifies profile picture</li><li>• Modifies About (description about them)</li><li>• Modifies the types of services provided</li><li>• Modifies price list of the services provided</li><li>• Knows past appointments</li><li>• Knows confirmed appointments</li><li>• Knows awaiting confirmation appointments</li><li>• Knows reviews made by customers</li><li>• Creates posts (write texts &amp; attach images)</li><li>• Accepts an appointment request</li><li>• Rejects an appointment request</li><li>• Gets payment</li><li>• Gives a rating to a customer</li><li>• Chats with a customer</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• Post</li><li>• Appointment</li><li>• Payment</li><li>• Review</li></ul>

## Appointment

<b>Class Name:</b> Appointment
<b>Parent Class (if any):</b> - <b>Subclasses (if any):</b> -
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Knows its ID</li><li>• Knows status of appointment (past / confirmed / rejected / awaiting confirmation)</li><li>• Knows the customer the service is for</li><li>• Knows the service provider</li><li>• Knows date of appointment requested</li><li>• Knows date of appointment confirmed</li><li>• Knows actual date of appointment</li><li>• Knows time of appointment</li><li>• Knows the address of the appointment</li><li>• Knows the payment ID associated with the appointment</li><li>• Modifies status of appointment</li><li>• Allows chat feature after appointment is confirmed</li><li>• Receives payment from customer</li><li>• Sends payment to service provider</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• Customer</li><li>• Service Provider</li><li>• Chat</li><li>• Payment</li></ul>

## Payment

<b>Class Name:</b> Payment
<b>Parent Class (if any):</b> - <b>Subclasses (if any):</b> -
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Knows its ID</li><li>• Knows breakdown of payment</li><li>• Knows payment method (debit / credit)</li><li>• Knows unique appointment ID associated with unique payment ID</li><li>• Knows the customer who is paying</li><li>• Knows the service provider the payment is for</li><li>• Knows date of payment</li><li>• Knows status of payment (sent to service provider from amorr / paid by customer to amorr as middleman / waiting for payment)</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• Customer</li><li>• Service Provider</li><li>• Appointment</li></ul>

## Post

<b>Class Name:</b> Post
<b>Parent Class (if any):</b> - <b>Subclasses (if any):</b> -
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Knows its ID</li><li>• Knows its posting user (service provider)</li><li>• Knows its posting date</li><li>• Knows its content</li><li>• Knows its images attached</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• Service Provider</li><li>• Customer</li></ul>

## Review

<b>Class Name:</b> Review
<b>Parent Class (if any):</b> - <b>Subclasses (if any):</b> -
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Knows its ID</li><li>• Knows the customer who writes the review</li><li>• Knows the service provider the review is for</li><li>• Knows the review date</li><li>• Knows the content</li><li>• Knows the images attached</li><li>• Knows the ratings (up to 5 stars)</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• Service Provider</li><li>• Customer</li></ul>

## Chat

<b>Class Name:</b> Chat
<b>Parent Class (if any):</b> - <b>Subclasses (if any):</b> -
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Knows the appointment ID</li><li>• Knows the user who sent the message</li><li>• Knows the user the message is for</li><li>• Knows the content and images attached</li><li>• Knows the time</li><li>• Knows the date</li><li>• Sends message containing text</li><li>• Sends message containing images</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• User</li><li>• Appointment</li></ul>



## DAO

<b>Class Name:</b> DAO (connects code to the database for automation between them)
<b>Parent Class (if any):</b> - <b>Subclasses (if any):</b> -
<b>Responsibilities:</b> <ul style="list-style-type: none"><li>• Create a user of type service provider, given email address, password, full name, address, types of services, and government-issued ID.</li><li>• Create a user of type customer, given email address, password, full name, address, and government-issued ID.</li><li>• Modify a user of type customer, given a customer unique ID and the modified: profile picture or/and address.</li><li>• Modify a user of type service provider, given a service provider unique ID and the modified: profile picture, or/and About, or/and types of services provided, or/and price list of services provided.</li><li>• Get a user given the correct email address and password.</li><li>• Get past appointments of a specific user given a user unique ID.</li><li>• Get confirmed appointments of a specific user given a user unique ID.</li><li>• Get awaiting confirmation appointments of a specific user given a user unique ID.</li><li>• Get reviews of a service provider given a service provider unique ID.</li><li>• Create an appointment, given a unique ID of the customer, unique ID of the service provider, services requested, date the appointment was requested, actual date of appointment, time of appointment, address of the appointment, breakdown of final price.</li><li>• Modify an appointment, given appointment ID, and the modified: status of appointment, or/and date of the appointment confirmed.</li><li>• Create a payment page, given an appointment ID.</li><li>• Create a review, given content containing text and images, ratings, review date, unique ID of customer, and unique ID of service provider.</li><li>• Create a post, given content containing text and images, posting date, and unique ID of service provider.</li><li>• Create a chat given an appointment ID, unique ID of customer, unique ID of service provider, date, status (read/sent), and content containing text and images.</li></ul>
<b>Collaborators:</b> <ul style="list-style-type: none"><li>• Customer</li><li>• Service Provider</li><li>• Appointment</li><li>• Payment</li><li>• Post</li><li>• Review</li><li>• Chat</li></ul>

## Software Architecture Diagram

