Group 5

First Chance Saloon

Dating Website

Mary Cronin - 0510661

Adrian O Sullivan- 16230124

Deirdre Shanahan- 16230256

Cornelius Broderick – 9119124

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Introduction

This project will be to produce an online dating agency. The basic functionality will allow users to register and describe themselves, as well as browse other users and perform various searches (e.g. list all men over 25 who listed swimming as a hobby).

High Level functionality

This website will support multiple users who are seeking a relationship. They will have two roles:

- Person initiating a contact
- Person receiving a request for a contact

The system will facilitate the communications between these two roles. The system will also support an administrator role whose function is to act as a mediator between users and will have the power to block or bar users. The system will monitor communications between users and automatically block messages that include inappropriate content.

Users will register their email address along with some personal details when setting up a new account. Once this is complete they will have access to do the following:

- Receive recommendations for people who match their profile
- Complete searches of the database to find people
- Communicate with other users
- Maintain account by updating profile, contact details or password
- Report inappropriate behaviour

For our website design we have chosen to take a minimalist approach in the number of questions being asked of the user. Based on our research we have concluded that physical attractiveness plays a major part in initial encounters (Swami & Furnham, 2008). The website will be limited geographically to Ireland.

User Stories

US001	**User Profile**	*Priority*	**High**
As A	User	*Estimate*	Medium
I would like	To be able to register a user profile which includes a description of myself and indicating my preferences for a partner		
Because	I am seeking a relationship with another person		

Acceptance Criteria	• I can record the following details:
	  ○ Name
	  ○ Email
	  ○ Date of birth
	  ○ Gender
	  ○ Preferred Partner gender
	  ○ Password
	  ○ Location (nearest City)
	  ○ Seeking Age Group
	  ○ Distance Will Travel
	  ○ Relationship Type
	  ○ Photo
	• I have the option of recording the following:
	  ○ Interests/Hobbies
	  ○ Bio
	• User can only create a profile if they are over the age of 18
	• Passwords are ranked in order of secureness
	• Only one profile per email address supported		

US002	**Profile Matching List**	*Priority*	**High**
As A	User	*Estimate*	High
I would like	To be able to search for specific criteria		
Because	I would like to be able to complete broad searches for potential partners		
Acceptance Criteria	• I can complete searches based on gender preference, age, hobbies or interests • I can find potential matches based on criteria above • The results are presented in photographic format • I can indicate my interest in the listed photographs		

US003	**Profile Matching List**	*Priority*	**High**
As A	User	*Estimate*	**High**
I would like	To be able to see people who are matched to my profile.		
Because	I would like to see top potential partner		
Acceptance Criteria	• Based on my profile I can see a list of matching potential partners • Location is included in the ranking with a high weighting • I can view more details of a match and from there initiate contact • I can mark a potential match as “like , maybe, goodbye”. • If I select a Goodbye, I am never presented with that profile again • This list is presented to me when I log in • I can report inappropriate behaviour		

US004	**Initiate Request**	*Priority*	**High**
As A	User	*Estimate*	Medium
I would like	Initiate chat with a person		
Because	I would like to be able to request a chat with a potential match		
Acceptance Criteria	• I can establish two-way conversation with another user • I can see chat history		

US005	**Receive Request**	*Priority*	**High**
As A	User	*Estimate*	Low
I would like	To be able to see a list of requests from other users		
Because	I need to see potential partners who are interested in meeting me		
Acceptance Criteria	• List of requests are visible and I can view their profile		

US006	**Moderation**	*Priority*	**Medium**
As A	System Administrator	*Estimate*	Low
I would like	To be able to oversee communications between users and block illegal or explicit content.		
Because	The web site has a duty of care to their users		
Acceptance Criteria	• A black list of words is maintained • Content containing black listed words is automatically blocked • The request will expire after a number of days • Option to report inappropriate content is available to users • Option to ban users from using the site		

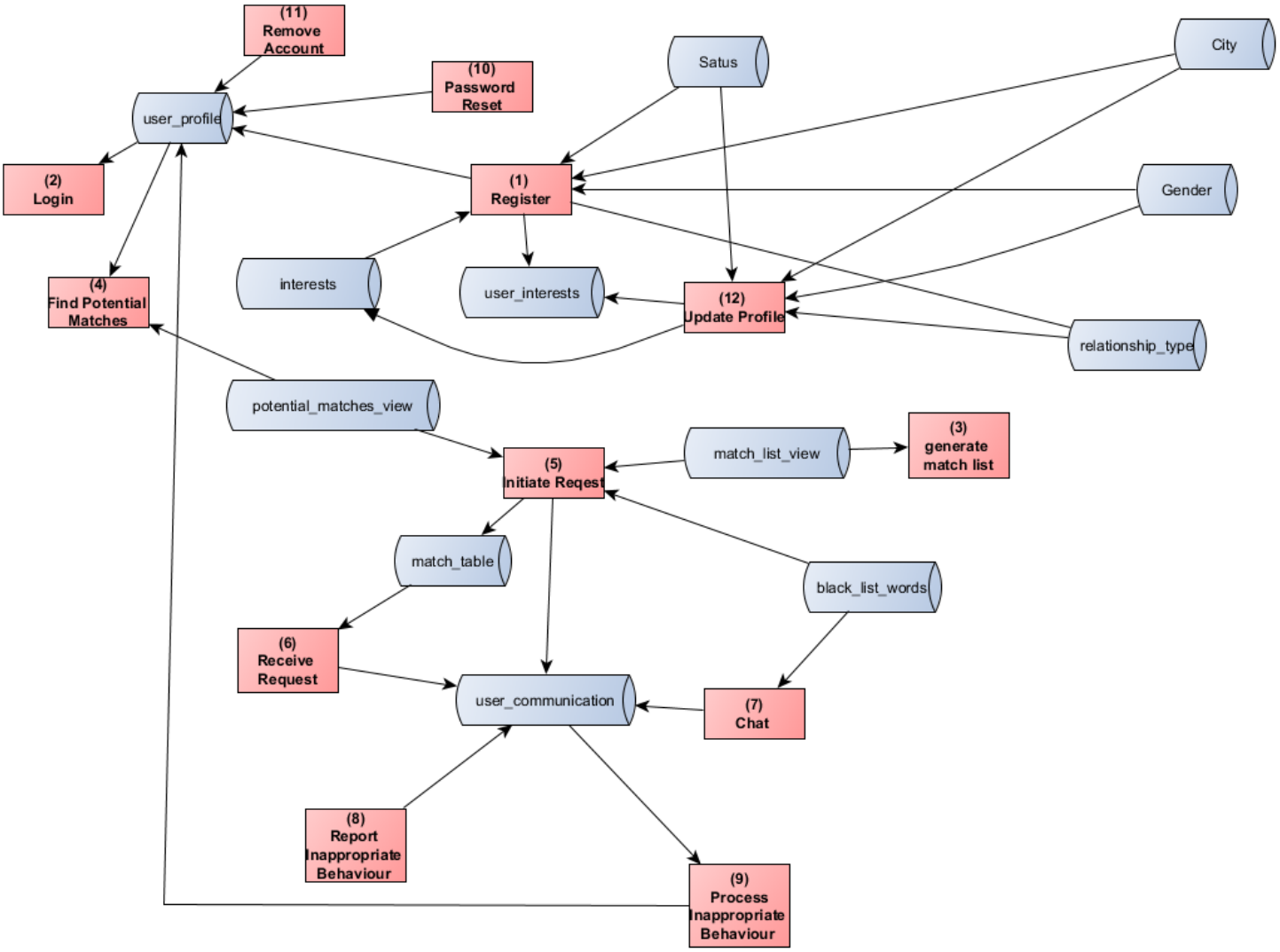
US007	**Moderation**	*Priority*	**High**
As A	System Administrator	*Estimate*	Low
I would like	Receive and process a notification of inappropriate behaviour from a user		
Because	The web site has a duty of care to their users		
Acceptance Criteria	• Users can be temporarily blocked from logging into the system for a period of time • User can be blocked from communicating with another specific user • User can be permanently blocked from using the system		

US008	**Account destruction**	*Priority*	**Medium**
As A	User	*Estimate*	Low
I would like	To be able to request that my account is removed from the system		
Because	GDPR compliance		
Acceptance Criteria	• User details including all communications from that user are removed from the system •		

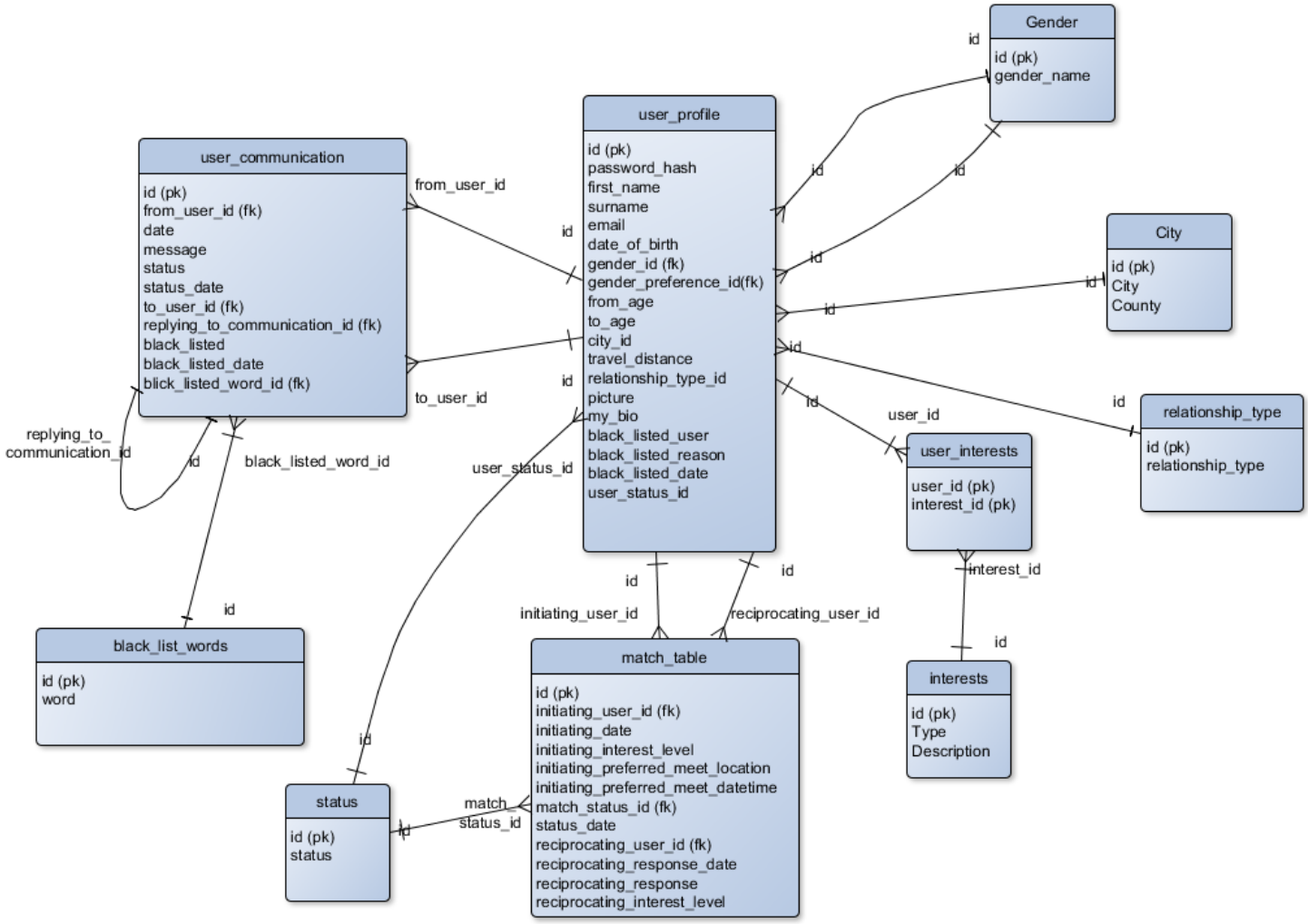
US009	**Password reset**	*Priority*	**High**
As A	User	*Estimate*	Low
I would like	To be able to reset my password		
Because	I forgot my password		
Acceptance Criteria	• Other users cannot reset my password •		

US0010	**Security**	*Priority*	**High**
As A	System administrator	*Estimate*	Medium
I would like	To have security built into the website to prevent Denial of Service (Dos) and other forms of malicious code from being stored in the database		
Because	I want to ensure availability of the website to our users		
Acceptance Criteria	• SQL Injection attacks are blocked • Malicious code is prevented from being added to the database • Users cannot initiate any form on the site without first having a profile • Users must communicate using the HTTPS protocol (if this is possible using the UL site)		

Data Flow Diagram



Entity Relationship Diagram



Web Page Mock Ups

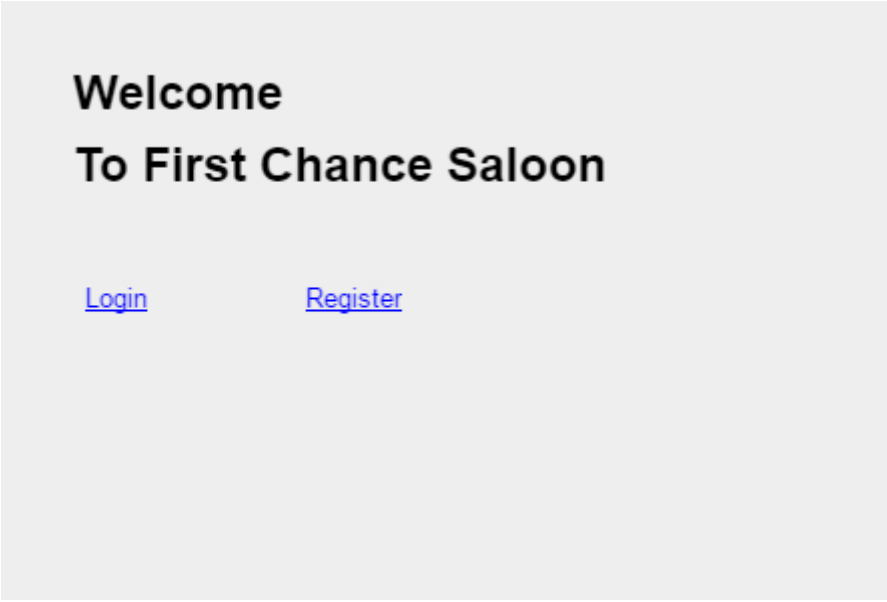


Figure 1 - Welcome Page

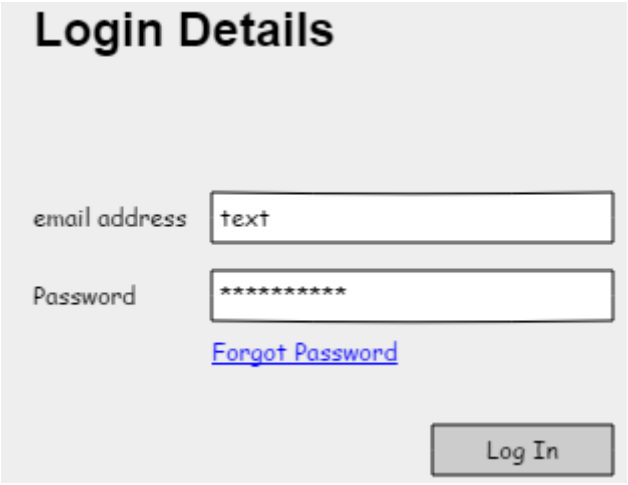


Figure 2- Login

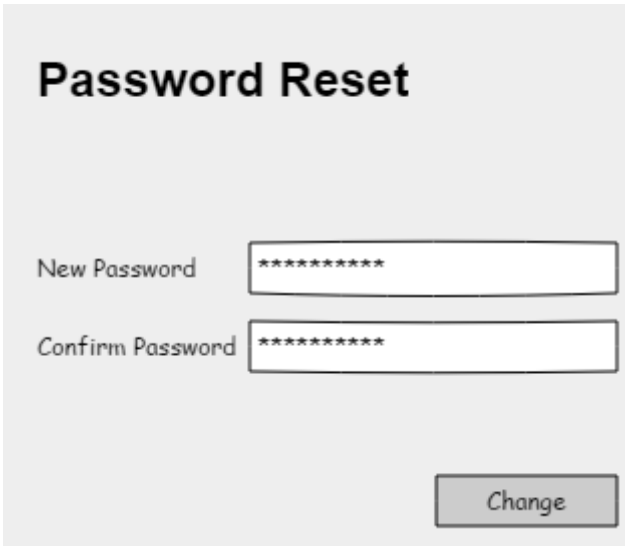


Figure 3 - Password Reset

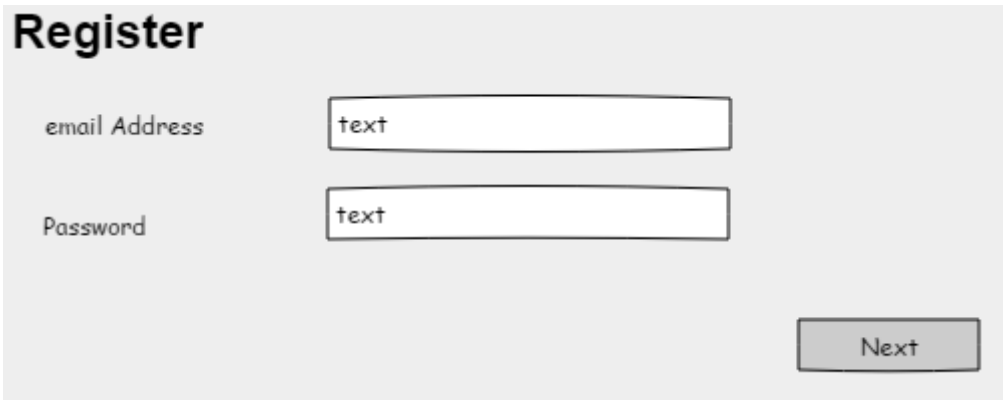


Figure 4 - Register

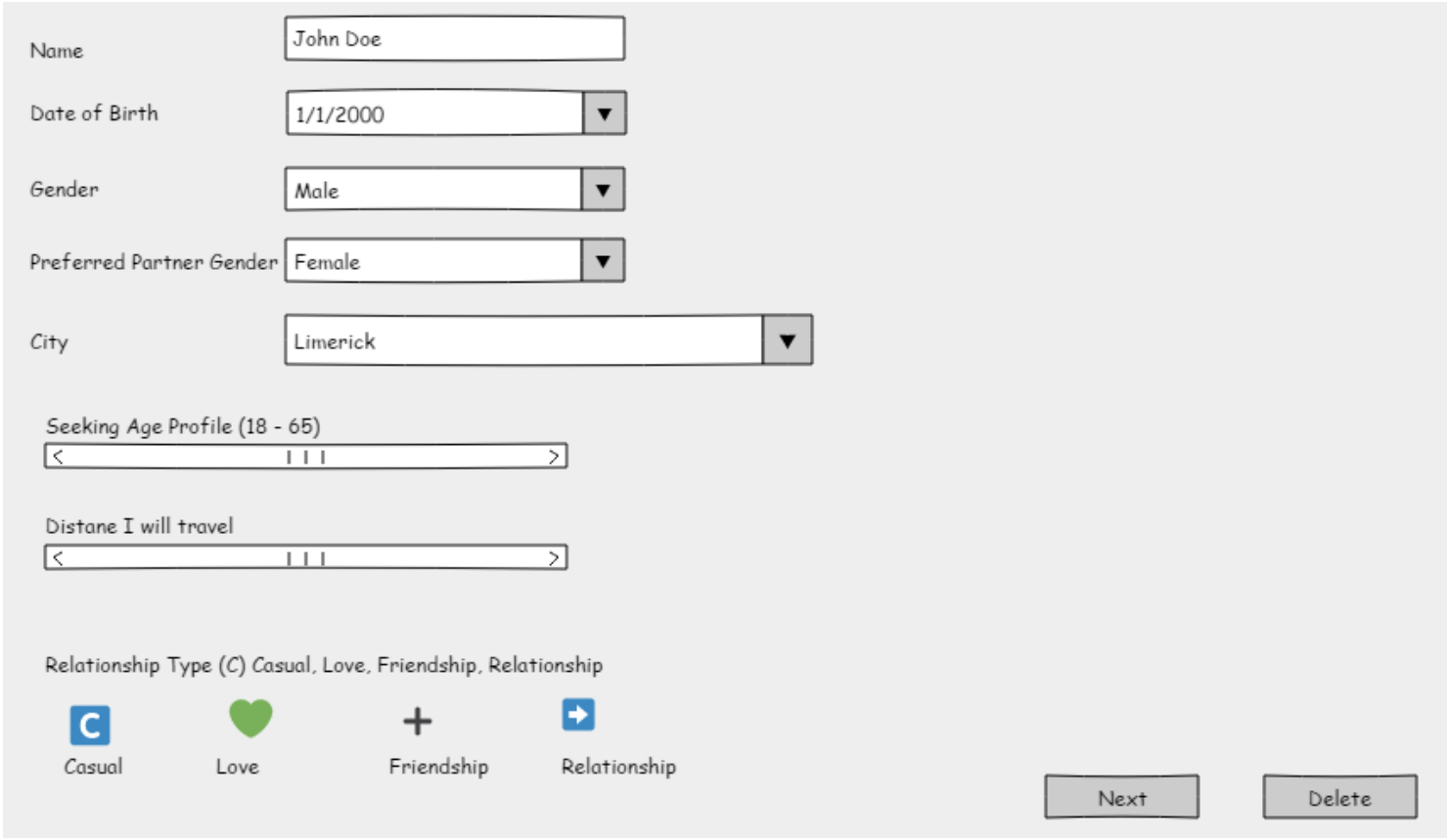


Figure 5 – My Profile Page One

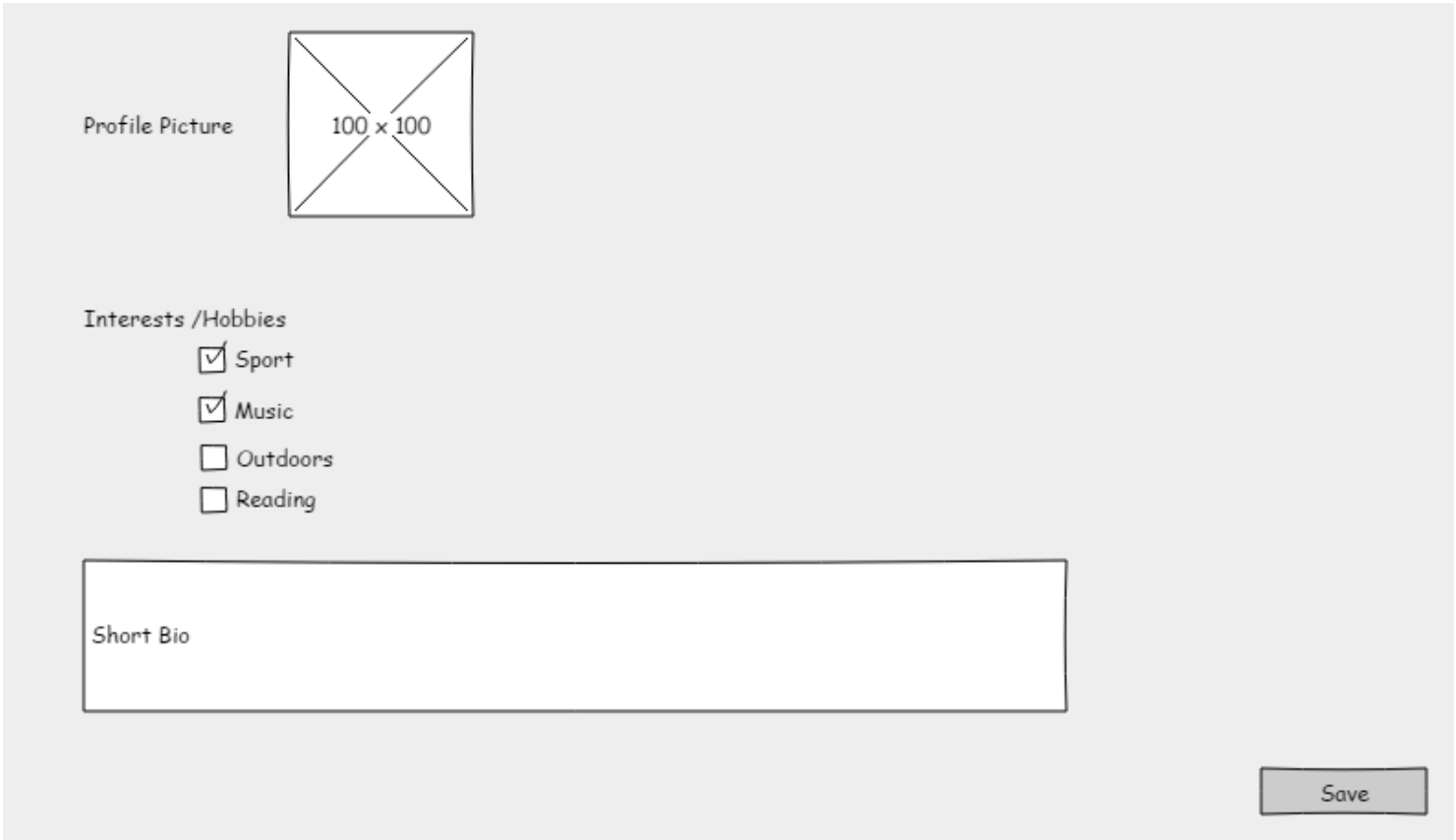


Figure 6 – My Profile Page Two

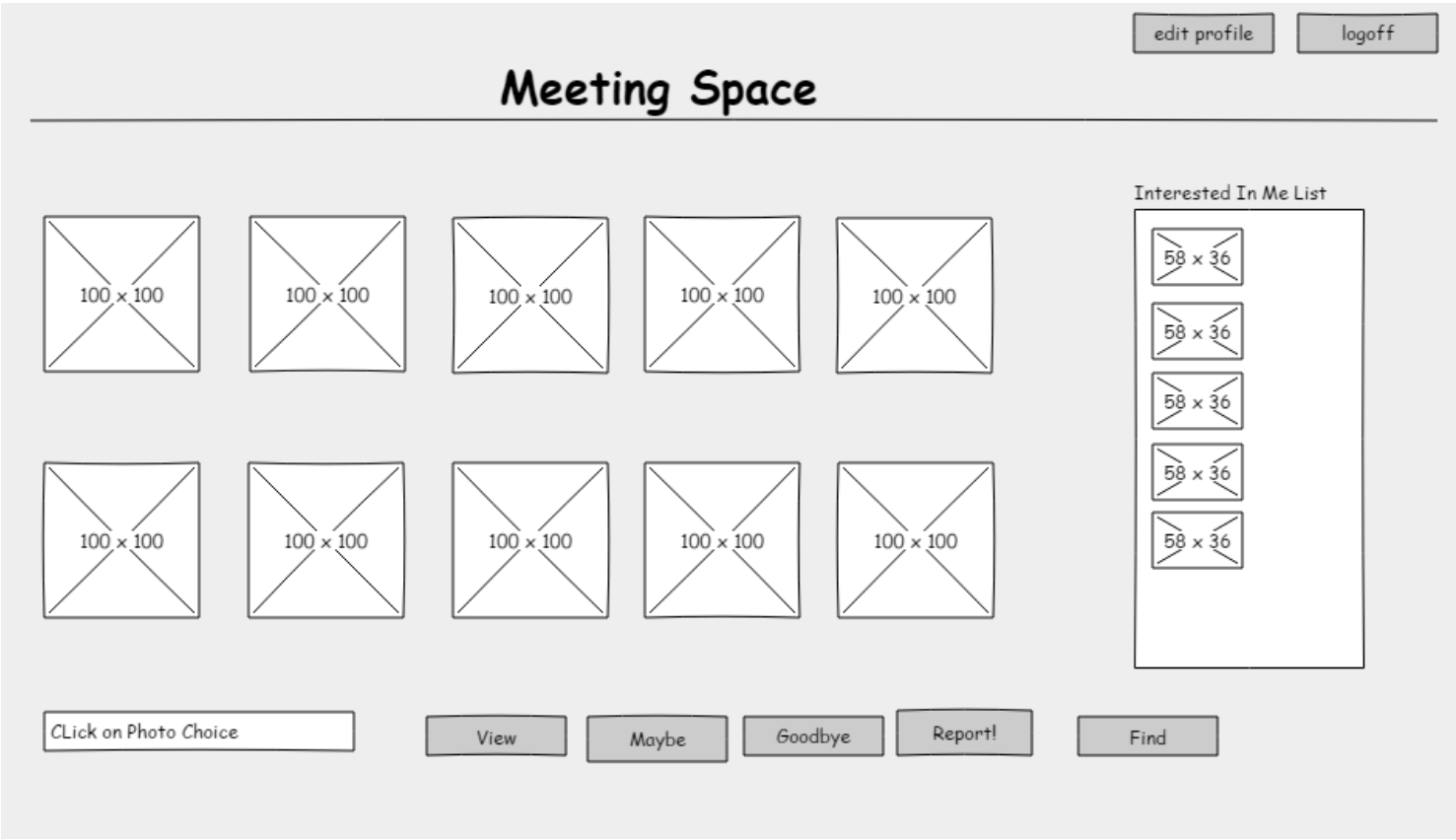


Figure 7 - Meeting Space

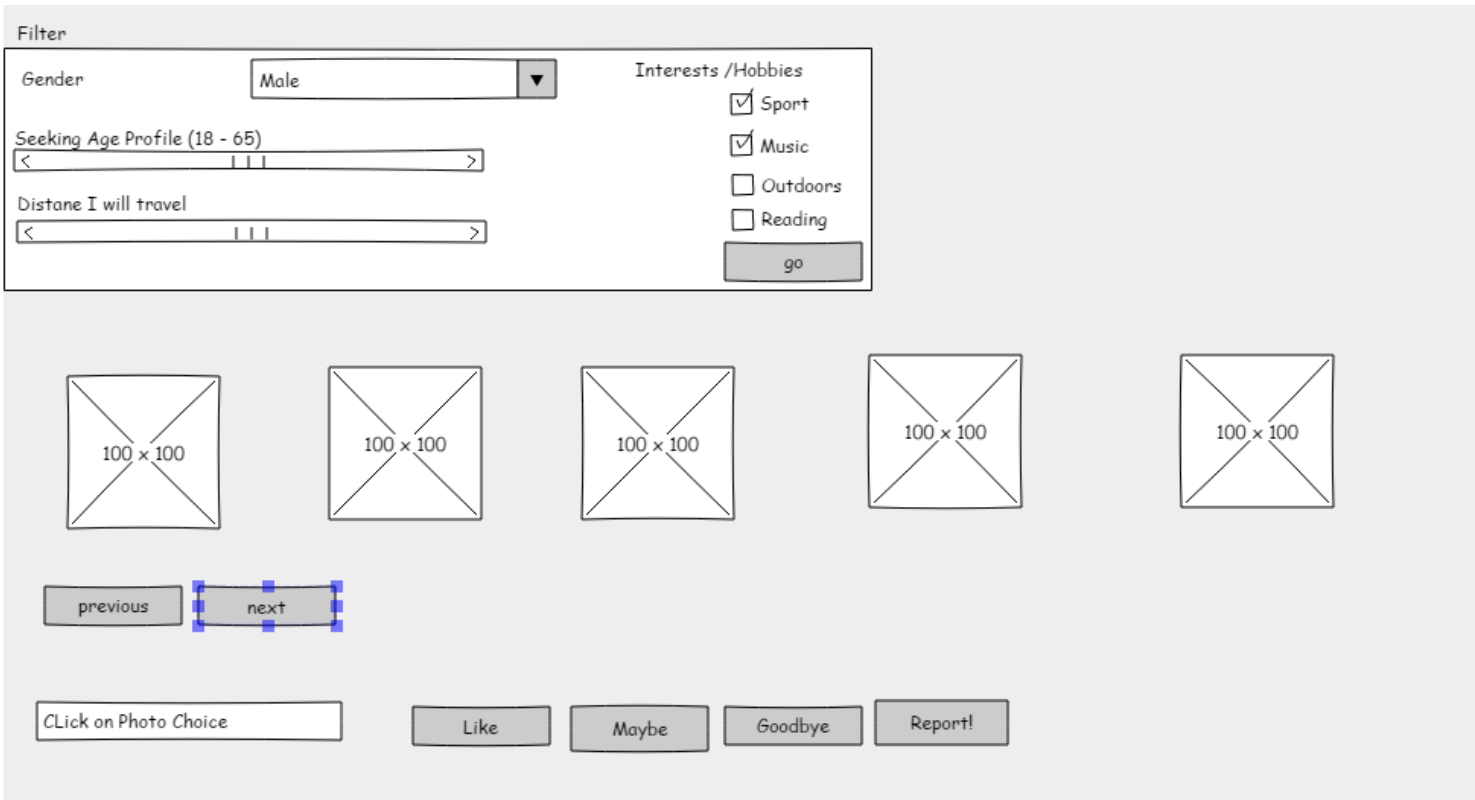


Figure 8 - Search

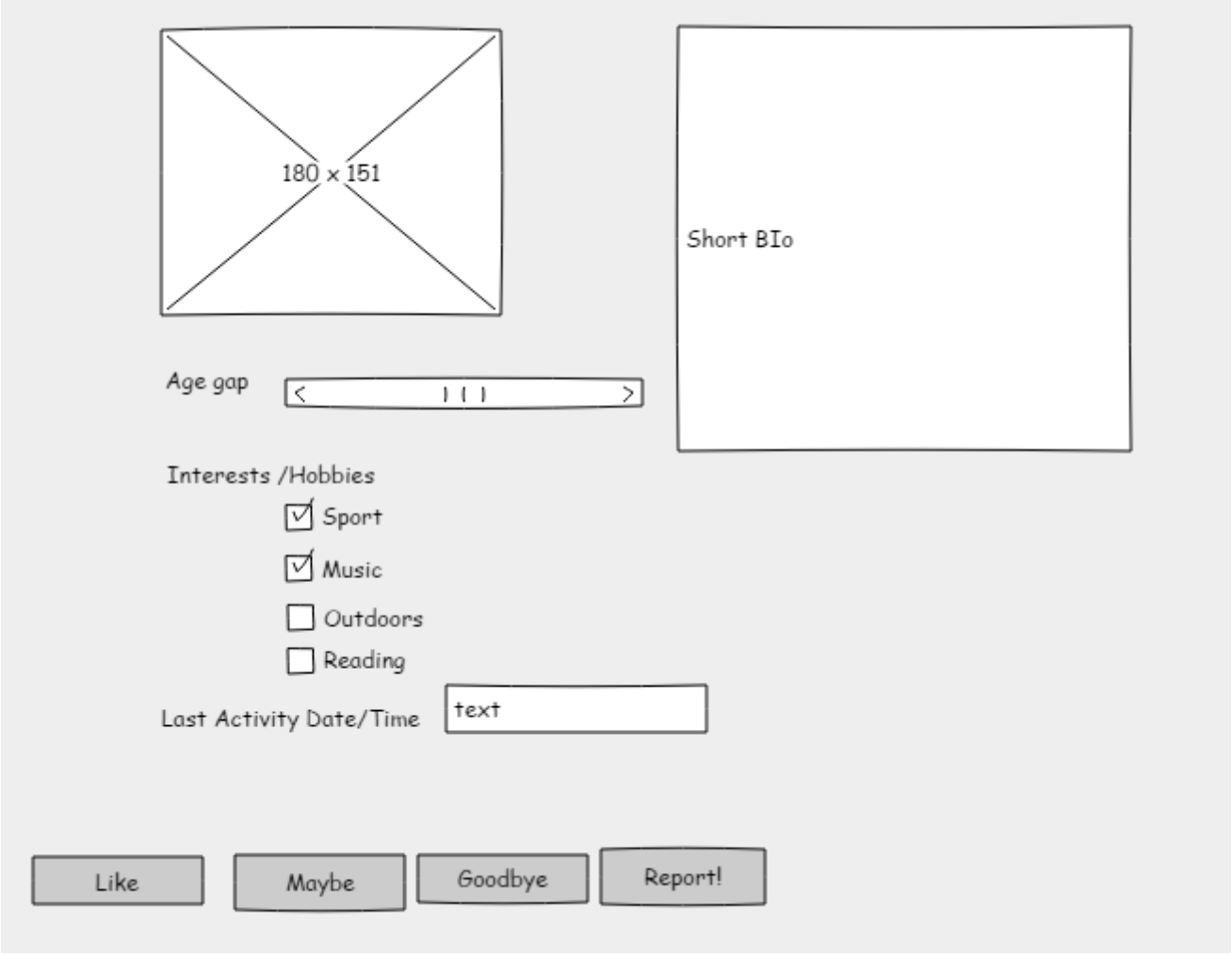


Figure 9 - View Match Profile

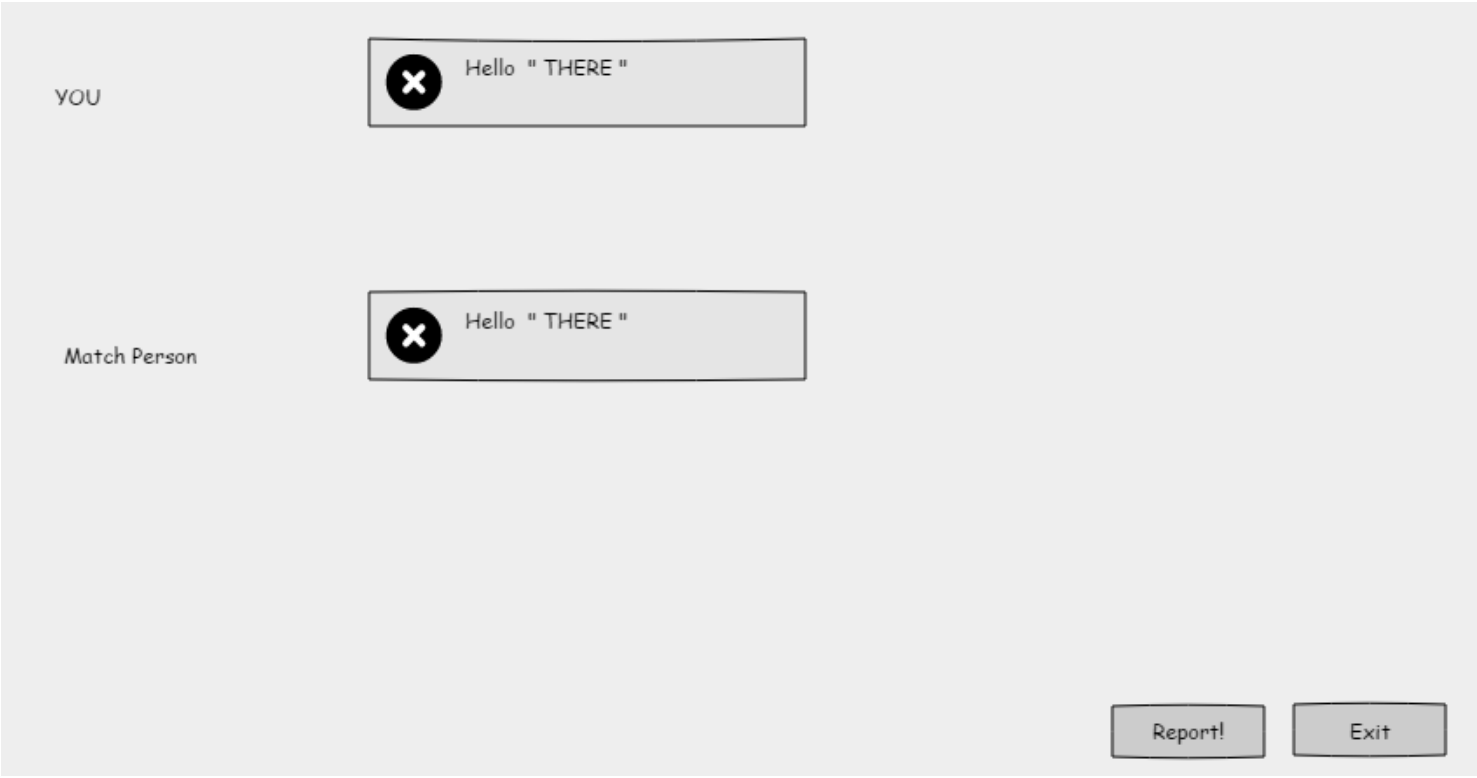


Figure 10 - Chat Line

Database Tables

Table 1 user_profile

Field	Type	Primary	Foreign
id	int	Yes	
password_hash	Varchar(200)		
first_name	Varchar(50)		
surname	Varchar(100)		
email	Varchar(100)		
date_of_birth	date		
gender_id	bool		yes
gender_preference_id	Varchar(20)		yes
From_age	int		
To_age	int		
City_id	int		
county	Varchar(100)		
Travel_distance	int		
Relationship_type_id	int		
picture	blob		
my_bio	Varchar(1000)		
Black_listed_user	bool		
Black_listed_reason	Varchar(100)		
Black_listed_date	date		
User_status_id	int		

Table 2 match_table

Field	Type	Primary	Foreign Key
id	int	yes	
Initiating_user_id	int		yes
Initiation_date	datetime		
Initiation_interest_level	int		
Initiation_prefered_meet_location	Varchar(100)		
Initiating_preferred_meet_datetime	datetime		
Match_status_id	int		yes
Status_date	datetime		
Reciprocating_user_id	int		yes
Reciprocating_response_date	datetime		
Reciprocating_response	Varchar(2000)		
Reciprocating_interest_level	int		

Table 3 user_communication

Field	Type	Primary	foreign
id	int	Yes	
from_user_id	int		yes
date	datetime		
message	Varchar(150)		
status	Varchar(20)		
Status_date	date		
To_user_id	int		yes
Replying_to_communication_id	int		yes
Black_listed	bool		
Black_listed_date	datetime		
Black_listed_word_id	int		yes

Table 4 black_list_words

Field	Type	Primary
id	int	yes
word	Varchar(100)	

Table 5 user_interests

Field	Type	Primary
User_id	int	yes
Interest_id	int	yes

Table 6 interests

Field	Type	Primary
id	int	yes
type	Varchar(100)	
description	Varchar(200)	

Table 7 Gender Table

Field	Type	Primary
id	int	yes
Gender_name	Varchar(100)	

Table 8 city Table

Field	Type	Primary
id	int	yes
city	Varchar(200)	
county	Varchar(200)	

Table 9 Relationship Type

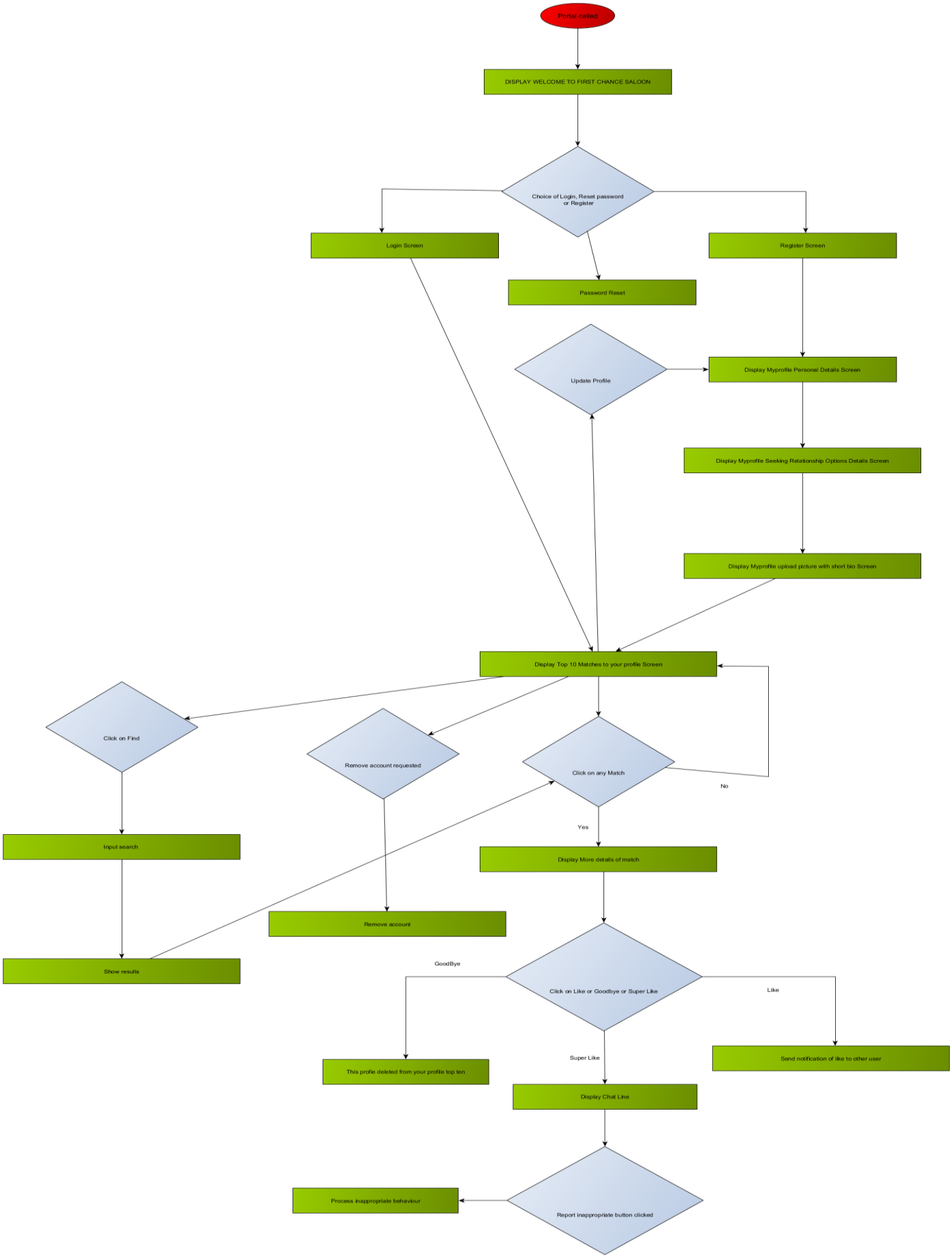
Field	Type	Primary
id	int	yes
Relationship_type	Varchar(200)	

Table 10 Status

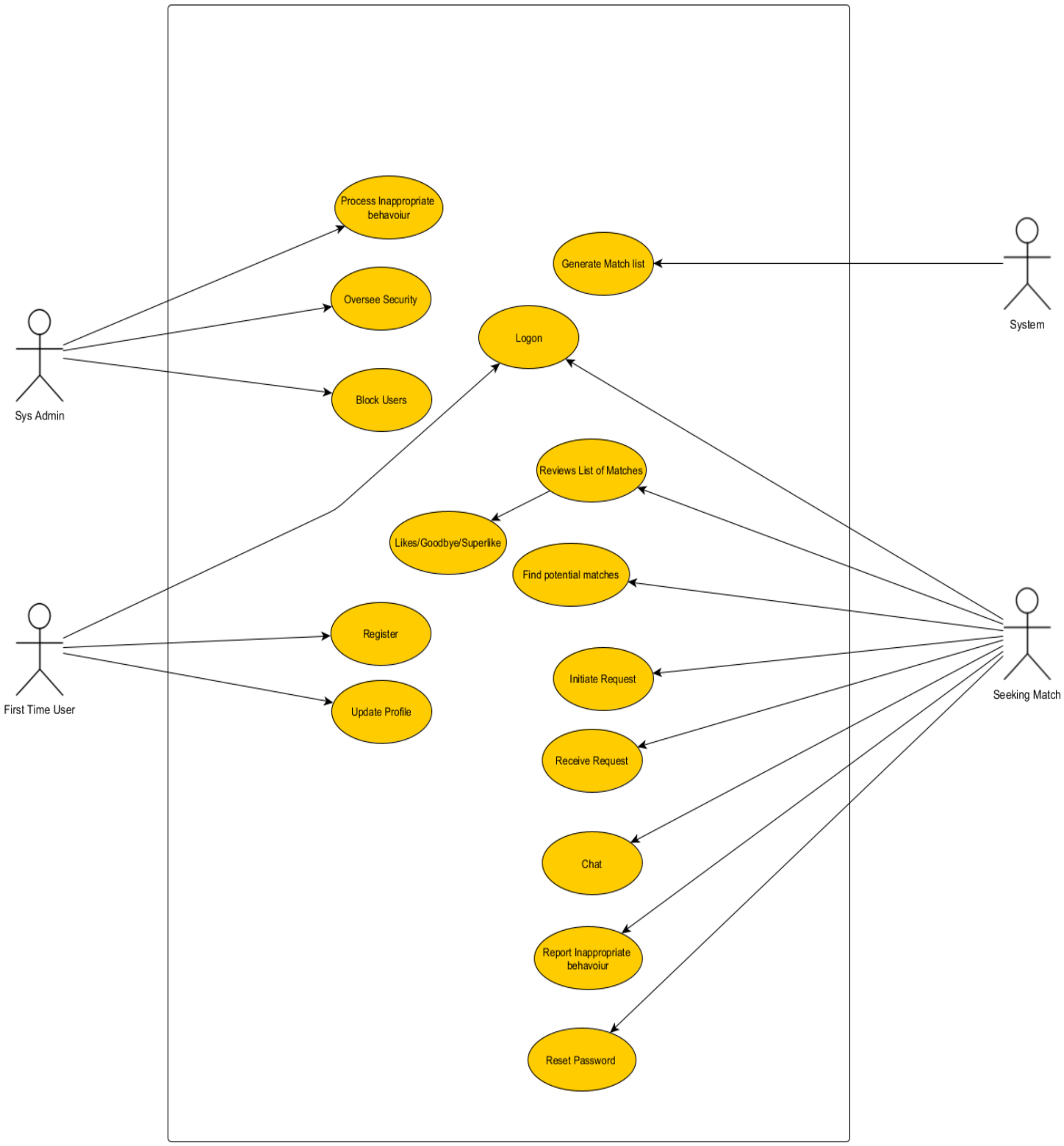
Field	Type	Primary
id	int	yes
status	Varchar(200)	

Process List:

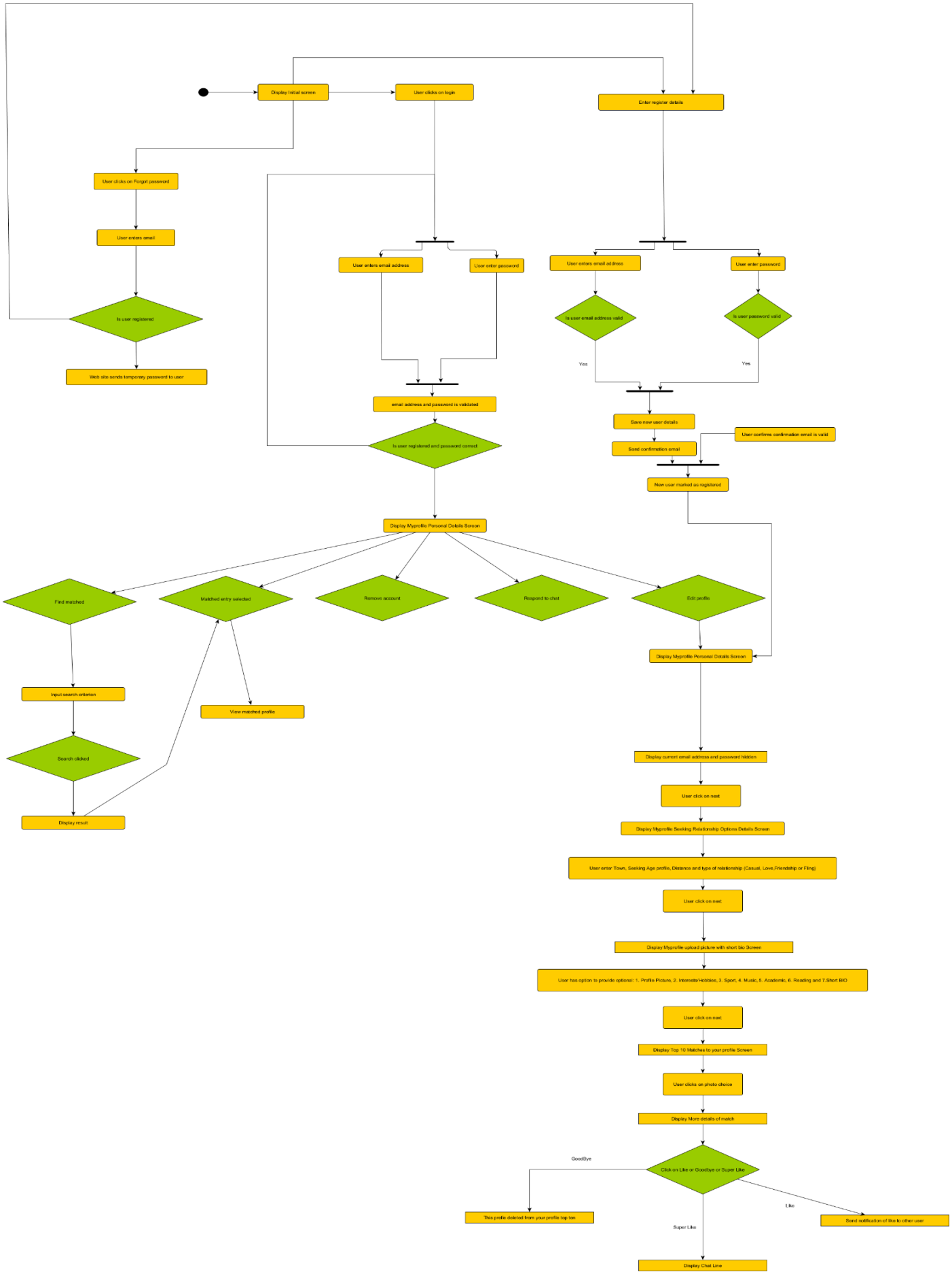
High level Process List Activity Diagram



Use Case System and Activity Diagram of Web dating site



Full Activity Diagram



Process Tables

Process #	1
Title	To be able to register a user profile
Brief Description	User can create an account

Inputs	• Name
	• Email
	• Date of birth
	• Gender
	• Preferred Partner Gender
	• Password
	• Location (nearest City)
	• Photo
	• I have the option of recording the following:
	  ○ Interests
	  ○ Hobbies
	  ○ Type of relationship
	  ○ Age profile of partner
	  ○ User can only create a profile if they are over the age of 18
	  ○ Passwords are ranked in order of secureness
	  ○ Only one profile per email address supported

Detailed Description	Add user details to the User_profile Table and user_interests table
Output	An insert into user_profile, user_interest

Process #	2
Title	To be able to update their user profile
Brief Description	User can change their profile details

Inputs	• Name
	• Email
	• Date of birth
	• Gender
	• Preferred Partner Gender
	• Location (nearest City)
	• Photo
	• I have the option of recording the following:
	  ○ Interests
	  ○ Hobbies
	  ○ Type of relationship
	  ○ Age profile of partner
	  ○ User can only create a profile if they are over the age of 18

	○ Passwords are ranked in order of secureness ○ Only one profile per email address supported
Detailed Description	Update user details to the User Table and user_interests
Output	An insert into user_profile, user_interest

Process #	3
Title	Logon
Brief Description	User can Logon to the system
Inputs	○ Email address and password
Detailed Description	User enters their email and password, these are checked against the entries in the user_table and if they match then the user is allowed into the system, if not they are presented with a message After 4 logon attempts, they are blocked from using the screen
Output	Match space screen if logon successful

Process#	4
Title	Search for specific criteria
Brief Description	The web site will automatically search and find matching profiles
Inputs	The inputs are the values which the user has stored in user_interests and interest tables.
Detailed Description	A broad search for potential partners completed based on profile preferences which include gender, age range and interests.
Output	Will generate an entry in the match_table with the users which match criteria.

Process #	**5**
Title	Users matched to my preferences
Brief Description	To be able to see a list of people who are matched to profile

Inputs	The user's selection from the findings of the matching profiles
Detailed Description	The user can view the list of photographs
Output	Photograph list

Process#	**6**
Title	Find users
Brief Description	User can enter criteria and get a list of pictures matching this criteria
Inputs	Gender, Age Range, Distance & Hobbies
Detailed Description	Based on the users inputs, the system will return a list of matching pictures and the user can then choose an action such as Like, Maybe, Goodbye or Report.
Output	A list of matching photographs

Process #	7
Title	View Profile
Brief Description	Allows user to view in more detail a potential match
Inputs	User clicks on the View Button
Detail Description	When the button is clicked, the Match screen is presented so that they can view the persons details which include interests, age, bio, etc.
Output	Match screen

Process #	8
Title	Maybe clicked
Brief Description	Allows user to indicate that they may be interested in chatting later
Inputs	User clicks on the maybe button
Detail Description	When the button is clicked, the profile selected is marked to be kept on the top match list
Output	Meeting Space screen

Process #	9
Title	Goodbye button
Brief Description	Allows user to indicate that they are not interested
Inputs	User clicks on the goodbye button
Detail Description	When the button is clicked, the profile selected is marked so that it is never presented to the user again
Output	Meeting Space screen

Process #	10
Title	List of people interested in chatting with me
Brief Description	To be able to see a list of people interested in chatting with me
Inputs	List of photographs
Detailed Description	• When a user initiates a chat, the receiving user can see in their image in a list • The user can choose to view their profile and decide what to do next
Output	User has visibility to details of people interested in initiating chat

Process #	11
Title	Handle inappropriate behaviour
Brief Description	Allow user to notify the system administrator of inappropriate behaviour
Input	Chat message from user
Detailed Description	Receive message from user, review the offending message and if deemed inappropriate notify the offender and if they persist with inappropriate behaviour they are blocked from accessing the system
Output	Offending user notified or blocked

Process #	12
Title	Account Deletion
Brief description	Allow user to delete their account
Inputs	User clicks on the Delete account and confirms deletion
Detailed Description	User details including all communications from that user are removed from the system
Output	Database entries deleted

Process #	13
Title	Password reset

Brief Description	To be able to reset my password
Inputs	User clicks on forgot my password
Detailed Description	Email sent to user with a link to reset the password, if user presses on the link, they are presented with a screen to allow the password change
Output	Password changed

Process #	14
Title	Logoff
Brief Description	User clicks on the Logoff button
Inputs	Button click
Detailed Description	Welcome screen is displayed and the user cannot enter the system again without entering their credentials
Output	Welcome screen

Bibliography

Swami, V., & Furnham, A. (2008). *The psychology of physical attraction*. New York, NY: Routledge/Taylor & Francis Group.