
Software Requirements Specification for 6PM

Version 1.0 approved

Prepared by
Chen Feiyu
Chen Taoyu
Christopher Lim
Guo Mukun
Yang Jingyi
Guo Zhiwei

*Nanyang Technological University,
School of Computer Science & Engineering*

7th February 2019

Functional Requirements:

1. The app shall provide a platform for gym enthusiasts, where the beginners among them can learn from more experienced ones.
2. Every user shall create an account in order to use the app.
 - 2.1. The user shall fill in a form when creating an account.
 - 2.1.1. The form shall include the user's email address.
 - 2.1.2. The form shall include a field for the user to retype his or her email address to confirm.
 - 2.1.3. The form shall include the user's username.
 - 2.1.4. The form shall include the user's password.
 - 2.1.5. The form shall include a field for the user to retype his or her password to confirm.
 - 2.2. After the creation of the account for the first time, the app shall require the verification of the provided email address before the user is able to login to the app.
3. Every user shall be required to login in when he or she starts the app
 - 3.1. The user shall need to type his or her email address.
 - 3.2. The user shall need to type his or her password.
 - 3.3. The app shall provide a password reset functionality if the user forgets his or her password.
 - 3.3.1. The app shall require the user to type his or her email.
 - 3.3.2. The app shall send an email to the user to change his or her password.
4. The user shall be able to create their own user profile.
 - 4.1. The user profile shall contain an optional profile image.
 - 4.2. The user profile shall contain the user's gender.
 - 4.3. The user profile shall contain the user's age.
 - 4.4. The user profile shall contain the user's level of experience.
 - 4.5. The user profile shall contain an optional description of the user.
 - 4.5.1. The description shall contain the individual strength(s) of the user.
 - 4.5.2. The description shall contain the individual interest(s) of the user.
5. The app shall provide the location of all the gyms around Singapore.
6. The app shall provide the function to search for the nearest gym from the user.
7. The user shall be able to post sessions.
 - 7.1. The session shall contain the time slot.
 - 7.2. The session shall contain the location of the gym the user is going to.
 - 7.3. The session shall contain the focus of the user.
 - 7.4. The session shall contain a flag indicating if the session has been matched
 - 7.4.1 This flag shall be maintained by the app.
 - 7.5. The user shall be able to indicate his or her level of experience in this particular focus.
 - 7.6. The user shall be able to indicate if he or she requires a partner of the same gender.
8. The app shall recommend sessions with similar session preferences to users who

have posted at least one session.

8.1. The app shall recommend sessions to users when all of the following requirements are met:

8.1.1. A recommendation shall happen when two sessions have overlapping time slots.

8.1.2. A recommendation shall happen when two sessions have the same location.

8.1.3. A recommendation shall happen when two sessions have the same focus.

8.1.4. A recommendation shall happen when the gender preference of the two sessions are agreeable.

8.1.5. A recommendation shall not happen when both participants are inexperienced.

9. The user shall be able to browse all existing sessions that have not been matched yet.

9.1. The user shall be able to filter the sessions according to their preference.

9.1.1. The preference shall optionally include session location.

9.1.2. The preference shall optionally include session focus.

9.1.3. The preference shall optionally include the gender of the partner.

9.1.4. The preference shall optionally include session timing.

10. The user shall be able to join any unmatched session if there is no time conflict with his or her existing sessions.

10.1. When the user joins a session, the app will change the flag of the session to matched.

11. The app shall support check-in functionality.

11.1. The app shall only allow a user to check-in for a session if the user is at the location of the gym determined by the user's GPS location

11.2. The app shall only allow a user to check-in for a session if the user arrives punctually

11.3. The app shall send a notification to a user when his or her partner has arrived if he or she has not arrived yet.

11.4. The app shall record the check-in status of both users for each session

11.4.1. The record shall contain the check-in time of both users.

11.4.2. The record shall contain a flag indicating if the session was successful or failed.

11.4.2.1. The session shall be marked as successful in the record if both users have successfully checked-in.

11.4.2.2. The session shall be marked as failed in the record if either or both users failed to checked-in.

12. The user shall be able to provide feedback after their session ends.

12.1. The user shall be able to rate their session on a scale of 1 to 5.

12.2. The user shall be able to comment on their session after it ends.

13. The user shall be able to cancel sessions with varying levels of penalty.
 - 13.1. If the user cancels the session before the session is matched, there shall be no penalty imposed.
 - 13.2. If the user cancels the session after the session is matched but there is still at least 24 hours before the start of the session, there shall be no penalty imposed.
 - 13.2.1. The partner shall receive an email notification in the event of a session cancellation.
 - 13.2.2. The app will change the flag of the session back to unmatched.
 - 13.3. If the user cancels the session after the session is matched and there is less than 24 hours before the start of the session,

Non-Functional Requirements:

1. The website shall finish loading within 2 seconds.
2. The session shall be automatically archived after it has expired.
3. The app shall send an email within 3 minutes after the user requires to reset his or her password.
4. The app shall handle at least 99% of fatal exceptions.
5. The app shall log all errors as and when they occur.

Data Dictionary:

Term	Definition
User	A User is a person who owns an account and is actively using the application.
Session	Sessions are created by users. A Session can have at most two users who will exercise together.
Partner	Partners are a separate user who is participating in the same session as the user.
Match	A match refers to the case that the app has found a partner for the user. A match only happens when certain criteria are met. Refer to Functional Requirement 8 for details
Focus	The muscle group which the user would like to focus on during their time at the gym.
Check-in	A check-in indicates that you have arrived at the gym location. Check-ins can be fulfilled only when the user is within close proximity to the gym location.
Flag	A flag is a true or false indicator which indicates whether a session has been matched. Any sessions with a flag set to 'false' will appear in the search result list.