

uTrack: Gym Tracker Proposal

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Introduction:

▫ Definitions

- Active-Living, encompasses the following facilities:
 - Fitness Centre, Aquatic Centre, Racquet Centre, Gymnastics Centre, Climbing and Bouldering Walls, Outdoor Centre at the University of Calgary.
- Primary Users:
 - Active-Living participants:
 - Dino's team members
 - Students in classes that require athletic hours
 - Students applying to scholarships that require athletic hours
 - Students who are interested in tracking their Active-Living usage
- Secondary Users:
 - Dino's coaches
 - Application reviewers who are verifying activity hours of others
- Tertiary Users:
 - Attendants at the specific Active-Living facility location
- Dino's:
 - University of Calgary athletic body

▫ Summary of the problem

- Many sports teams and school programs require that their students record a certain number of hours in the gym or performing other athletic activities. However, the Active-Living facilities at the University of Calgary do not have a simple way for participants to verify the number of hours they spend utilizing these services.

▫ Summary of the solution

- A two-way hour tracking system can be imposed for willing participants, where the participant can enter a goal for gym hours, track the cost of rented equipment, and see which facilities they used. The front-attendants at the gym will verify themselves and, upon a request from a participant entering an Active-Living facility, will log a user into the system to record their verified hours.

▫ Motivation

- There is no quick way to verify the number of hours an individual has been at the University of Calgary gym (or other Active-Living facilities). For the members of our group, this is an irritating problem as we regularly use these facilities and want to know how much time we spend in them. The solution would be especially useful for student athletes and coaches to verify that individuals have gone to a facility for the required number of hours.

▫ Proposal format

- The rest of the proposal will be as follows:
 - A problem definition will be introduced (the various required questions will be answered within the paragraphs)
 - The solution will be described in more detail
 - The motivation behind the solution will be explored
 - A conclusion and reference set will be provided

Problem Definition

- The University of Calgary offers many opportunities for students to stay active. Some students require gym and/or the use of other Active-Living facilities for participation on Dino's teams, for certain academic programs, or for scholarship applications. However, there is currently not an easy way for these students to access their hours and verify them using these services. A current "system" that exists for this tracking is the honor system, in which individuals put the onus on themselves to track their hours. However, this has the potential to create distrust and requires users to remember exact hours each time when they use one of the facilities. Thus, it becomes a difficult task for many to verify the number of hours they spend using the Active-Living facilities. Some other gym organizations, such as the YMCA, offer usage reports that can be requested at the front-desks of these gyms and printed. A potential improvement on this system would be to make them online at all times, meaning users would not have to make physical requests to gym employees to print their reports and instead could access them digitally at any point in time.

Proposed solution:

- The overarching goal of this project, the *uTrack: Gym Tracker* is to allow student athletes, coaches, students, and staff to have their physical activity time at the Active-Living centres be tracked and verified. This will allow individuals to view their activity time from a web-interface. Individuals will also be able to specify types of activities they are partaking in (as a part of Active-Living mentioned in the "definitions" section). Activity time will be inputted by attendants (tertiary users of the web-interface) and they will be able to facilitate the verification of activity time. An anticipated activity time could be inputted by the primary users, that would be useful for goal setting and sectioning off time(s) throughout the day.
- The project will primarily produce a web-interface with multiple sections corresponding to the types of users (eg. Attendants versus Student Athletes). The interface will include forms which will allow end users to input different Active-Living facilities, equipment used at the facilities, user name, student ID's, check-in, and check-out times. Different roles and information will be granted to the different types of users in the system. For instance, the gym attendants will have a more limited user interface as their primary goal is to verify customer hours.

Motivation:

- The solution is required to ease the recording of hours for Active-Living users at the University of Calgary. Verified hour tracking is essential for many programs, making the solution important and desirable for students. The main thing that makes this project unique is the fact that the hour tracking software is being combined with cost-tracking and goal-setting elements as well. This makes it even more useful for the user as compared to a system that only tracks and verifies

hours. Additionally, the system being present in an online web-interface allows users to access information at any time.

Conclusion:

- While the University of Calgary has many Active-Living facilities, hour tracking in these systems can prove to be difficult as there is currently not a centralized tracking system that also verifies hours. The goal of our solution is to track the hours of users and help them verify them at the same time. Additionally, the solution will help primary users keep track of other Active-Living logistics, including the costs of equipment rentals.
- A basic timeline for this project (along with its deliverables) is as follows:
 - An Extended ER Diagram (including problem scope, user tasks, etc.) by **February 12th**
 - The Relational Model by **February 26th**
 - Initial Project Tools, frameworks, and technological implementation decisions by **March 12th**
 - All diagrams, and database setup finalized by **March 12th**
 - Front End, including user forms finalized by **March 24th**
 - Database implementation using backend tools finalized by **end of March**
 - Connecting and integrating system (front and backend) along with documentation and other functionalities done by **April 7th**

References section:

- 1) Active-Living Facilities Reference:
<https://active-living.ucalgary.ca/memberships-drop/active-living-memberships>
- 2) YMCA Hour Tracking Reference [need account to sign-in to view hours]:
<https://www.ymcacalgary.org/>

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