WWU Honors College Senior Projects   WWU Graduate and Undergraduate Scholarship

Spring 2022

Coach Otto: Creating a Program to Program Weightlifting

Haylee Rawdin

Follow this and additional works at: https://cedar.wwu.edu/wwu_honors

Part of the Computer Sciences Commons

Recommended Citation

Rawdin, Haylee, "Coach Otto: Creating a Program to Program Weightlifting" (2022). *WWU Honors College Senior Projects*. 567.
https://cedar.wwu.edu/wwu_honors/567

Software Requirements Specification

Coach Otto

By: Haylee Rawdin

Version 1.0

Table of Contents

1.   PR/FAQ

HayTech Releases Coach Otto App for Olympic Weightlifting Coaches and Athletes

Coach Otto helps Olympic Weightlifting coaches automate the process of programming

Apr 21st, 2022. HayTech is excited to bring you *Coach Otto,* a smartphone app that assists coaches in creating individualized Olympic Weightlifting programs for their athletes. Coaches can invite their athletes to join the app via email. Athletes are then asked a series of questions about their experience, goals, and background in weightlifting. They are also asked to send in videos of their lifts which the app will analyze to find weak points. Once the sign-up process is complete, the app automatically creates an individualized training program for the athlete based on the information given. The coach has full access to the programming and is able to track their athlete's progress day-to-day, and tailor the program even further to the individual.

There are no other apps on the market that build individualized Olympic Weightlifting programs for athletes. It becomes tedious for coaches to make changes in weight, reps, and movements week-to-week for each athlete, especially as a team grows. Coach Otto automates this process by creating individual weightlifting programs for their athletes. Based on the athlete's logged response to each workout, the program automatically updates with necessary changes. Coach Otto automates the busy work coaches experience with programming, giving them more time to focus on their athlete's progress and training.

Coaches and athletes can start using Coach Otto today on iOS and Android. Once you are signed up as a coach, you can add your athletes with an invitation sent to them through email. From there, your athletes will create their own account which will automatically affiliate them with you.

"We are excited to help coaches and athletes fine tune their Olympic Weightlifting programs." *said Haylee Rawdin, President of HayTech, "With Coach Otto, we can relieve some of the stress for coaches associated with programming, giving them more time to focus on their athlete's training, and allowing them to make changes to the programming when they need to."*

"Coach Otto has saved me so much time by creating individualized programs specific to my athletes and their needs. It offers me a baseline for my athletes that I can build upon based on their response to the programming both mentally and physically." - Justin Manipis, Mos Strength.

Download Coach Otto today to start receiving individualized programming for your Olympic Weightlifting team. Start your free 14-day trial before choosing the pricing plan that works best for you and your team.

For Coaches:

- **How can I start using Coach Otto as a coach?**

  You can download Coach Otto for free on iOS and Android today. Once downloaded, create an account for your team and choose a plan that works best for the number of athletes you have. Whoever creates the team account will have access to all athletes and all coaches on the team.

- **How do I add an athlete to my team?**

  To add an athlete to your team, click the "Add Athlete" button under your team's account settings. You will be asked to fill out a form with the athlete's name and email address. The athlete will receive an email with a link to sign up for Coach Otto through the athlete portal. Once they are signed up, they will appear on your list of athletes and you will have full access to their programming.

- **How do I add a coach to my team?**

  If you would like to add additional coaches to your account, click the "Add Coach" button under your team's account settings. You will be asked to fill out a form with the coach's name and email address. The coach will receive an email to sign up as a coach on Coach Otto. Only the owner of the team account is able to modify each coach's access to the programming.

- **What is the pricing?**

  You can start a free 14-day trial to see if Coach Otto works for you and your team. If you decide to continue with Coach Otto, there are three pricing plans to choose from based on the number of athletes you have:

  - **Basic:** $30/mo for up to 5 athletes
  - **Standard:** $75/mo for up to 15 athletes
  - **Premium:** $120/mo for up to 25 athletes

  Your plan can be changed at any time.

- **What if I'm a coach who wants programming?**

  Coaches are able to sign themselves up as athletes. Just follow the same steps as above, and sign up through the link sent to you in your email. When logged into your coach profile, you can go to your settings and click "Add Athlete View." This will take you to the athlete login screen. After you log in, you will be able to switch between coach view and athlete view within the app, without having to sign out each time.

  Note: you will be counted towards the total number of athletes on your team.

- **What if I have more than 50 athletes?**

    Contact us for custom pricing!

- **How does Coach Otto create its programs?**

    Coach Otto creates its programs based on the athlete's answers to the onboarding questions and the videos sent in. The app does not use pre-made programs, and instead creates new and unique programs for each athlete.

    When an athlete signs up, they are taken through an intensive sign-up process that asks about their athletic background, experience in weightlifting, availability, and goals in the sport. Athletes are also required to upload videos of their lifts during this process. The video gets analyzed by the app, which tracks the bar path to determine what positions in the Snatch and Clean and Jerk can be improved. Coach Otto will use all of this information to create an individualized program that is specific to the athlete's experience and goals in the sport.

- **How much control do I have over the programming once it's created?**

    Coaches have full control over their athlete's programming and are encouraged to make any changes they believe will benefit their athletes. This may mean decreasing the weight and adding in more recovery movements if an athlete starts to experience pain. Or, maybe an athlete needs to change the days of the week they work out.

    Additionally, coaches can request a new program for their athletes. This is useful if the answers to the athlete's onboarding questions change. For example, if an athlete signs up for a meet and they want a training plan to help them peak. Coaches can also pause or cancel an athlete's programming at any time.

    Our goal is not to automate the process of coaching, but to act as a tool to assist coaches with the busy work that comes from programming weightlifting. Thus, we grant full control to coaches to alter anything that doesn't work for their athletes. We believe that coach knows best.

For Athletes:

- **How can I start using Coach Otto as an athlete?**

    Once your coach invites you to join the team, you will receive a link in your email to create an account for Coach Otto. The sign-up process will ask you a series of questions about your experience in weightlifting. You will also be asked to submit videos of your lifts to help Coach Otto create your individualized program. When you are finished signing up, you will automatically be affiliated with your team.

- **Can my programming be changed, paused, or canceled?**

  Yes! Coaches have full control over your programming and can make any changes necessary. We encourage you to let your coach know about any concerns you have with the program.

  Additionally, coaches can request new programming from Coach Otto. This is useful if your answers to the onboarding questions change. For example, if you sign up for a meet and want programming to help you peak. Your coach can also pause or cancel your programming at any time. We do not allow athletes to alter their own programs.

- **Do I have to pay for Coach Otto?**

  Nope! Athletes use the app for free.

- **How does Coach Otto create its programs?**

  Coach Otto creates its programs based on your answers to the onboarding questions and the videos sent in. The app does not use pre-made programs, and instead creates new and unique programs for each athlete.

  When you sign up, you are taken through an intensive sign-up process that asks about your athletic background, experience in weightlifting, availability, and goals in the sport. You are also required to upload videos of your lifts. The video gets analyzed by Coach Otto, which tracks the bar path to determine what positions in the Snatch and Clean and Jerk can be improved. The app will use all of this information to create a unique program that is specialized to your experience and goals in the sport.

2.   User Personas

2.1.   Jacob Smith is a 40 year old olympic weightlifting coach:

Biography: Jacob Smith has been weightlifting for over 12 years now and decided to start coaching about eight years ago. He got a job as head olympic weightlifting coach at a strength and conditioning gym. He has around 10 athletes that come to his olympic weightlifting class four days a week. Currently, Jacob has a daily workout that all of his athletes follow when they come into the class.

Motivations: He is motivated by his athletes and their growth in the sport of olympic weightlifting. He looks up to the coaches of elite athletes and hopes to have a competitive team of weightlifters at his gym.

Goals: Jacob's goal is to help his athletes grow. He would love for each of his athletes to have their own weightlifting programs that address their weaknesses, rather than having everyone follow the same workout each day. He wants to have a competitive weightlifting team and believes that helping athletes individually is the best way to help his team progress.

Biggest Challenges: Jacob does not have the time to program for each of the athletes on his team. It is easier for him to create one daily workout for the whole class to follow.

2.2.   Amy Johnson is a 28 year old remote olympic weightlifting coach:

Biography: Amy Johnson is a remote olympic weightlifting coach. Amy decided to start an online coaching business to share her passion for weightlifting and help others grow in the sport. She has been weightlifting for over five years now and started her business a year ago. Currently, Amy writes a unique weightlifting program for each of her athletes.

Motivations: Amy is motivated by other olympic weightlifting teams and hopes that her business can continue to grow and that more athletes join her team.

Goals: Amy's goal is to help athletes of all experience levels improve in the sport. She wants her team to grow and hopes that her online coaching business can become a full time opportunity.

Biggest Challenges: As Amy's team grows, she worries that she will not be able to continue customizing each athlete's weightlifting program. She would love for the process of programming to be more automated so she can continue offering individualized training plans.

2.3.   **Chloe Dover is a 22 year old olympic weightlifter:**

Biography: Chloe Dover is a competitive olympic weightlifter. She started the sport around seven years ago. She has been training at the same facility since she started, and is loyal to her coach and facility.

Motivations: Chloe is motivated by her coach and the other members of her gym. She looks up to elite olympic weightlifting athletes.

Goals: Chloe's goal is to become more serious in the sport. She has competed locally a few times, but wants to start attending national competitions.

Biggest Challenges: Chloe has a lot of experience in the sport, but needs to fine tune her technique. She wants a training plan that is more specific to her and her weaknesses in the lifts. She would also like programming that helps her peak for competitions. She wants to stay at her current gym with her coach she has known for years.

2.4.   **Michael Fernando is a 19 year old who wants to learn more about weightlifting:**

Biography: Michael Fernando is a recent high school graduate. He played soccer in high school and has had about two years of experience training in a gym. He has tried olympic weightlifting, but wants to become become more serious about the sport. He decided to join a remote team with a dedicated olympic weightlifting coach to help him out.

Motivations: Michael is motivated by other olympic weightlifting athletes and hopes to learn from them.

Goals: Michael is hoping to learn more about olympic weightlifting. He is new to the sport and wants to learn the proper technique for each lift.

Biggest Challenges: Although he has found many free programs online, Michael feels he needs a program that is less general and more targeted to his experience level and the problems he faces with his technique. He feels like he would not benefit from a general olympic weightlifting class and wants more one-on-one coaching

3.   Critical User Journeys

3.1.   Jacob is the head olympic weightlifting coach at his gym. He has been weightlifting for over 12 years now and started coaching eight years ago. Jacob spends most of his day at the gym. He coaches various fitness classes, does personal training, and maintains the facility. He teaches a weightlifting class four days a week which about 10 members come to each day. He writes a daily workout for the class to follow.

Jacob wants his weightlifting athletes to improve even more. He believes the best way to achieve this goal is for each athlete to have their own program to follow that is more specific to their goals and experience levels. Jacob wishes he had more time to dedicate to creating a workout plan for each individual. He decides to download Coach Otto, which will help him achieve this goal by automating the process of programming weightlifting.

Once the app is downloaded, he creates an account for his team and chooses his membership plan. Now that he is signed up, he invites each of his athletes to join the app. He enters their names and email addresses into the Add Athlete form in the app. Once the athletes join, they are automatically affiliated with Jacob's team. Jacob reviews their customized weightlifting programs and makes changes as he sees fit. As his athletes come in to practice throughout the week, they follow their individual workout routines given to them through the app. Jacob assesses each of his athletes on their technique and is excited that his trainees get a more individualized workout to follow.

At the end of the week, Jacob looks through the app and analyzes the logged workouts, including the comments left by the athletes, the videos uploaded, and the RPEs listed. Jacob decides that one of his athletes should squat one less day a week to put less strain on his knees. He edits the athlete's program and changes the movement from squats to RDLs for the upcoming week. Jacob is glad that Coach Otto allows him to look back at the work his athletes put in during the week and give them additional feedback. He is happy with how Coach Otto is going for his athletes and he decides he would like to have his own program written for him. He invites himself as an athlete and connects his athlete profile with his coach profile, allowing him to easily switch between different views on the app.

3.2.   Michael is 19 years old and graduated high school a year ago. He played soccer in high school and has done some general training at the gym for his sport. He learned the olympic lifts from a friend and does them for fun at the gym. Michael has really started to enjoy these lifts and decides he wants to learn them properly. He does not know of any olympic-style weightlifting coaches near him. Instead, he finds someone on social media who coaches weightlifting remotely and decides he wants to join her team.

After getting in touch with her, he receives an email invitation to join her team through Coach Otto. He clicks on the link, downloads the app, and starts creating his account. He inputs his name, email address, and password. Now that his account is created, he starts answering questions to help Coach Otto craft his training plan.

Michael first answers questions about his background. He enters the number of years he has been physically active and selects the activities he is familiar with, like soccer and general lifting. Next, he tells Coach Otto that he is a beginner in weightlifting and has had less than six months of experience. Michael enters his one rep max for snatch, clean and jerk, clean, front squat, back squat, power clean, and power snatch. Michael chooses the days of the week he can work out and enters the amount of time he has per day for his workouts. He tells Coach Otto his goal in weightlifting which is to build strength on the lifts and increase his mobility. He uploads a video of him performing each lift so Coach Otto can analyze his technique. The app builds a weightlifting program for Michael with the provided information.

Throughout the week, Michael leaves comments for his coach letting her know how he is feeling about the movements. He also uploads videos of his lifts so she can give feedback on his technique. Currently, Michael trains the lifts three days a week for an hour and a half a day. He likes that Coach Otto provides a video for each movement since he is new to olympic weightlifting. The app updates Michael's workouts week-to-week based on the work he logs and the RPE he inputs for each movement. At the end of this four week cycle, Michael's coach will answer questions about how the cycle went, and the app will create a new cycle of programming for him to follow.

4.   User Stories

P0:   As a coach, I want individualized programming made for my athletes that updates automatically week-to-week, so that I can save time.

P1:   As a coach, I want to invite my athletes to join the app, so that I have access to their programming.

P2:   As an athlete, I want a program that considers my background in weightlifting, so I am training at a level that benefits me.

P3:   As an athlete, I want to upload videos when signing up for the app, so that I know my program is focused on improving my form on the lifts.

P4:   As an athlete, I want to enter my weightlifting goals, so that I know my training is preparing me to meet those goals.

P5:   As an athlete, I want a program that accounts for my schedule, so that I don't have to miss any workouts.

P6:   As a coach, I want the programs to be editable, so that I can make changes that better suit my athletes when needed.

P7:   As a coach, I want my athletes to log their workouts, so I can see how they are doing with the programming and decide what changes I should make.

P8:   As a coach, I want to leave comments on my athletes' workouts, so that I can give more direct feedback on their training.

P9:   As a coach, I want my athletes to be able to message me, so I can quickly answer their questions or address their concerns.

P10:   As a coach, I want to request new training plans if needed, so that my athletes' training remains reflective of their goals.

P11:   As head coach, I want to invite other coaches on my team to join the app, so that all the coaches can access the programming and provide unique feedback.

P12:   As an athlete, I want to see a video of the movement I am supposed to perform, so that I feel more comfortable during my workout.

P13:   As a coach, I want to connect my athlete profile that has my own programming, so that I can easily switch between my accounts in the app.

P14:   As a head coach, I want all coaches on the team to have individual accounts, so that we do not need to use a shared password.