

Group 5

Team Sunrise

**Healthletes**

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- **Will you create an interactive prototype before you begin coding (e.g. using Figma), or will you work from static wireframes?**
  - We've already created a prototype using Figma which is static. The purposes are making our page design consistent and listing all the elements we want to include on the website.
- **What are the acceptance tests that your team will perform before beginning user testing? Describe the acceptance testing process for at least two key features, including which results would indicate a successful test and which results would indicate a failed test.**
  - **Quiz:** for the quiz feature, the acceptance testing process would involve verifying its functionality and accuracy in determining appropriate exercises based on users' medical history and volleyball position. Successful tests would demonstrate that users can navigate through the quiz, selecting answers to multiple-choice questions related to their medical history and volleyball position
    1. Go to the quiz page by clicking the QUIZ on the nav bar on the home page
      - a. Success: direct to the quiz page correctly
      - b. Fail: direct to the other page, or nothing shows up
    2. Start answering questions, around 5 multiple choice questions. For each question, the user flow is similar.
      - a. Success: able to select one choice
      - b. Fail: the radio button is unclickable; questions don't show up.
    3. After answering one question, click NEXT
      - a. Success: Enter to the next question
      - b. Fail: Enter the previous button, or nothing shows up
    4. If the user wants to revise the answer for the previous question, click PREVIOUS.(other than the first question)
      - a. Success: Go back to the previous question, and change the answer
      - b. Fail: Enter the next question or the previous answer cannot be changed
    5. After completing the last question, the user will click the SUBMIT to see the result
      - a. Success: generate personalized exercise recommendations tailored to the user's specific needs and circumstances
      - b. Fail: Unable to provide relevant exercise recommendations based on the user's input, if there are errors in the quiz navigation or question presentation, or if the quiz does not

consider all relevant factors in determining exercise recommendations, leading to potentially ineffective or inappropriate suggestions.

- **Diagram:** for the diagram feature, the acceptance testing process would focus on validating its functionality and usability in providing essential information about joints and tendons affected during volleyball.
  1. Go to the DIAGRAM page by clicking the DIAGRAM on the nav bar on the home page
    - a. Success: direct to the DIAGRAM page correctly
    - b. Fail: direct to the other page, or nothing shows up
  2. Look for and hover the muscles on the left leg(/right leg/ left arm/right arm)
    - a. Success: relevant information about the joint or tendon appears as expected and correctly.
    - b. Fail: the information displayed is inaccurate or incomplete, e.g. show information about other muscles
  3. Direct user to the relevant video resource when clicking on the label
    - a. Success: direct to the relevant video correctly, and the video can be played successfully
    - b. Fail: the video page is broken or leads to irrelevant content
- **What are the limitations of your acceptance tests? List some of the ways that your team's in-house testing environment may differ from the context in which your expected users will be interacting with the product.**
  - **Limited Video Authority:** Because we are not professionals, we cannot authenticate the information obtained on the Internet. Our platform only provides exercise suggestions and cannot be regarded as an authoritative expert.
  - **Limited Domain Knowledge:** In our group, only one group member is really familiar with volleyball. So, while we are researching about the resources to put on the website, we may have limited perspectives and neglect target users' needs.
  - **Limited Diversity in Testers:** we may not be able to represent the full diversity of the target user population in terms of age, technical proficiency, or physical abilities. This can lead to a bias in testing results and may overlook issues that could arise for users outside the student demographic.
  - **Limited Resources for Testing:** we have limited resources, such as time, budget, and access to professional testing tools, which can constrain the depth and scope of acceptance testing. This may result in incomplete coverage of use cases and potential issues.

- **Limited Accessibility:** our platform relies on users being able to interact visually. leading to potential oversights in ensuring the product is usable by individuals with disabilities.
- **How will you conduct user testing?**
  - Our approach will involve recruiting a diverse group of target users, including volleyball players of varying skill levels and individuals with relevant medical conditions. We will design test scenarios that simulate typical user interactions with the website, such as navigating through exercise recommendations, using the quiz feature to determine personalized exercises, and interacting with the diagram to access resources. Testing sessions will be conducted in a controlled environment to observe user behavior and gather feedback through verbal communication, surveys, and task completion metrics. Iterative testing cycles will allow us to refine the website based on user insights and improve overall usability, effectiveness, and user satisfaction. Additionally, we will document observations, identify usability issues, and prioritize enhancements to address during development iterations.
- **How will you decide which bugs to fix first?**
  - Deciding which bugs to fix first will involve prioritizing based on factors such as severity, impact on user experience, and alignment with project objectives. Critical bugs that significantly impair functionality, compromise security, or pose safety risks to users will be addressed immediately to ensure the basic usability and safety of the website. Next, bugs that affect core features essential to achieving the project's goals will be prioritized to maintain the website's primary purpose. Our P0 or the main features will be the Quiz, Interactive body diagrams, and Nav bar, such as the quiz functionality or access to exercise resources, which will have the highest priority on bug fixing. Finally, less critical bugs that have minimal impact on usability or can be addressed through minor enhancements may be deferred to later development cycles to focus on higher-priority issues, e.g. P2 features: some links to external websites are broken. Regular reviews and discussions with stakeholders will guide the decision-making process to ensure alignment with project priorities and user needs.
- **How will you re-test the solution after the bug fixes have been completed?**
  - After bug fixes have been implemented, re-testing the solution will involve conducting regression testing to ensure that the fixes have not introduced new issues and that the previously identified bugs have been effectively resolved. This process will include re-executing test cases related to the fixed features and verifying that they now behave as expected. Once

re-testing is complete and the fixes are validated, the solution can proceed to further testing stages, such as acceptance testing, to confirm that it meets the desired quality standards before deployment.

Points	Criteria
5 points	Fully on-track. Shows strong progress towards the items listed in the prompt, and relevant next steps are clearly identified.
4 points	Mostly on-track. Shows good progress towards the items listed in the prompt, and relevant next steps may or may not be identified.
3 points	Somewhat on-track. Shows only partial progress towards the items listed in the prompt, and relevant next steps are not identified.
2 points	Submission is related to the prompt, but does not provide enough detail to assess the current level of progress.
0 points	No submission.

#### Type of test:

- Unit test: low-level, granular
- Acceptance/Integration test: whole features or user flow
- Regression test: verify the bug stays fixed

#### Accessibility

- Well-structured HTML with grader + alt tags
- High contrast for text + UI widgets
- Large touch or click targets
- Caption and transcription for videos
- Chrome, Lighthouse, webpage test.org