

| Acceptance Testing

Acceptance Criteria ID	Acceptance Test	Acceptance criteria	Test Result (Accept /Reject)	Comment
1	As a user, I want the front-end website can communicate with the back-end server so that my calculations behind the scenes can be sent to the front-end website.	<p>Scenario: The front-end program can send the requests to the server while the server can send back the calculation results as responses.</p> <p>Given:</p> <ul style="list-style-type: none">• The user browser prepared a request. <p>When:</p> <ul style="list-style-type: none">• The user browser sends a (REST/HTTP) request to the server. <p>Then:</p> <ul style="list-style-type: none">• The server should calculate the result.• The result is returned back to the user's browser.	Accept	
2	As a user, I want the backend server can connect with the database so that my calculation results can be stored in the database for further use.	<p>Scenario: The calculation results can be stored in the database when the server connects to the database and inserts the data.</p> <p>Given:</p> <ul style="list-style-type: none">• The database and the server instance have a healthy connection. <p>When:</p> <ul style="list-style-type: none">• The server updates the data into the DB instance. <p>Then:</p> <ul style="list-style-type: none">• The data is immediately available when the update transaction has been completed.	Accept	
3	As a user, I want the backend server can query all the required input data from the database so that I don't need to type any additional input as before	<p>Scenario: The required input data can be queried from the DB when the server is calculating the results.</p> <p>Given:</p> <ul style="list-style-type: none">• The database and the server instance have a healthy connection.• The user made inputs for the calculation. <p>When:</p> <ul style="list-style-type: none">• The server starts the calculation process and updating the data into the DB instance. <p>Then:</p> <ul style="list-style-type: none">• The previous inputs should all become visible on the frontend.	Accept	

4	As a user, I want the backend server can return some important variables or error messages(e.g. out of range/extrapolation) to the frontend website during the calculation so that I can track the calculation process and find the problems easily and be aware of potential sources of discrepancies.	<p>Scenario: The user can view the important variables or error messages during the backend calculation.</p> <p>Given:</p> <ul style="list-style-type: none"> The database and the server instance have a healthy connection. The user made inputs for the calculation. <p>When:</p> <ul style="list-style-type: none"> The server starts the calculation process and updates the data into the DB instance. <p>Then:</p> <ul style="list-style-type: none"> The important variables or error messages should all become visible. 	Accept	
5	As a user, I want all of the data* to be correctly interpolated, calculated, and updated , so that I can use them for the audit process.	<p>Scenario: The user wants to upload Bw, Mu/rho, Closed Cone Corr (CCC), Nk, Pstem and gets <i>correct</i> results.</p> <p>Given:</p> <ul style="list-style-type: none"> The database and the server instance have a healthy connection. <p>When:</p> <ul style="list-style-type: none"> The user made inputs for the calculation. <ul style="list-style-type: none"> The calculation and interpolation involve: <ol style="list-style-type: none"> Bw Mu/rho Closed Cone Corr (CCC) Pstem Nk The input consists of Excel, and frontend HTML input. <p>Then:</p> <ul style="list-style-type: none"> The calculation result should be correctly responded to the frontend and stored in the Database. 	Accept	
6	As a user, I want to see all audit cases on the system website.	<p>Scenario: The user wants to view all the audit cases on the web application.</p> <p>Given:</p> <ul style="list-style-type: none"> The database and the server instance have a healthy connection. <p>When:</p> <ul style="list-style-type: none"> The user is logged in with the User account <p>Then:</p> <ul style="list-style-type: none"> All cases with their audit ID, date, clinics and status are visible to the frontend. 	Accept	

7	As a user, I want to search the specific audit case by date, audit number, etc.	<p>Scenario: The user wants to view specific audit case(s) on the web application.</p> <p>Given:</p> <ul style="list-style-type: none"> The database and the server instance have a healthy connection. The user is logged in with the User account <p>When:</p> <ul style="list-style-type: none"> User type audit ID/date/clinics /status in the search box (or filter toolbar) <p>Then:</p> <ul style="list-style-type: none"> The corresponding audit case(s) will be visible. 	Accept	
8.1	As a user, I want to be able to log in to the website so that I can use the functions provided on the server.	<p>Given:</p> <ul style="list-style-type: none"> The user is located on the login page. A good and healthy web server. <p>When:</p> <ul style="list-style-type: none"> The user inputs username, and password, then hit the login button. <p>Then:</p> <ul style="list-style-type: none"> The user will be redirected to the Audit cases page. 	Accept	
8.2		<p>Given:</p> <ul style="list-style-type: none"> The user is located on the login page. A good and healthy web server. <p>When:</p> <ul style="list-style-type: none"> The user inputs the INCORRECT username, and password, then hit the login button. <p>Then:</p> <ul style="list-style-type: none"> The user will stay on the login page with error messages. 	Reject	
9.1	As a user, I want to be able to change the password so that I can use my own secret to access the system.	<p>Given:</p> <ul style="list-style-type: none"> The user is located on the login page. A good and healthy web server. <p>When:</p> <ul style="list-style-type: none"> The user inputs username, and password, then hit the login button. <p>Then:</p> <ul style="list-style-type: none"> The user will be redirected to the Audit cases page. 	Accept	

9.2		<p>Given:</p> <ul style="list-style-type: none"> The user is located on the login page. A good and healthy web server. <p>When:</p> <ul style="list-style-type: none"> The user inputs the INVALID username, and password, then hit the login button. <p>Then:</p> <ul style="list-style-type: none"> The user will be redirected to the Audit cases page. 	Reject	
10	As a user, I want to be able to log out of the website so that nobody can see my account on my machine	<p>Given:</p> <ul style="list-style-type: none"> The user is logged in with the User account. The user is located on the Audit cases page. A good and healthy web server. <p>When:</p> <ul style="list-style-type: none"> The user input hit the log out button. <p>Then:</p> <ul style="list-style-type: none"> The user will be redirected to the login page. 	Accept	
11	As a user, I want to make sure that all services and functionality provided by the webserver are serving the authenticated individual/entity so that the system is secure.	<p>Given:</p> <ul style="list-style-type: none"> The user is logged in with the User account. The user is located on the Audit cases page. A good and healthy web server. <p>When:</p> <ul style="list-style-type: none"> The user made any input in the identification/lookup/change password function. <p>Then:</p> <ul style="list-style-type: none"> The user will be prompted /redirected accordingly. (The functions are served normally) 	Accept	
11.1		<p>Given:</p> <ul style="list-style-type: none"> The user is logged in with the User account. The user is located on the Audit cases page. A good and healthy web server. An expired user token. <p>When:</p> <ul style="list-style-type: none"> The user made any input in the identification/lookup/change password function. <p>Then:</p> <ul style="list-style-type: none"> The user will be prompted /redirected to the login page. (The user input will never work) 	Reject	

12	As a user, I want to be able to use the webserver in my local machine so that the security of the system is maximized.	Given: <ul style="list-style-type: none">• A completed solution (backend, frontend, database)• All solutions can run standalone as a Docker service. When: <ul style="list-style-type: none">• Client access the web server on the local machine. Then: <ul style="list-style-type: none">• Every functionality should be available on the webserver.	Accept	
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