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Low Fidelity Prototype

Digital low fidelity prototypes were created through the free prototyping platform Marvel Prototyping

To view and demo the digital prototype use the Marvel link below

Marvel link

<https://marvelapp.com/prototype/175j9i6e/screen/86230658>

User Stories

V3.0

Epic ID	Epic	User Story ID	As an ACDS	I want to	So that I can	Priority	Size	Justification
1	Manage Accounts	1.1	Admin	Create new accounts	Allow new employees to use the tool	Should Have	M	<p>Priority: Users may not change very frequently so if the list of users is hard-coded into the database it would not cause many problems</p> <p>Size: There will need to be restrictions on who can create new accounts so that not just anyone can create an account. These restrictions will add complexity to the feature.</p>
		1.2	Admin	Log in to the system	update the calibration data	Must Have	M	<p>Priority: Necessary to allow different users such as admins to access the application with higher permissions than others</p> <p>Size: The addition of accounts which allow access to restricted content results in increased complexity within the security and authentication processes of the application, as the app must check that a user is authorised before accessing any restricted pages.</p>
		1.3	Admin	Control user access level	Limit who can change the data in the database	Could Have	S	<p>Priority: Login already acts as basic access control, further implementation would improve flexibility in regards to the manipulation of user hierarchies</p> <p>Size: Implementation of this would be would only require small changes, as the security complexities involved are an extension of those found in the login process for users</p>
2	View Data	2.1	Auditor	Export data	Use the data in an audit calculation	Must Have	M/L	<p>Priority: This is a core requirement of the system which the client needs in order to continue the rest of the process as they were previously doing, making it a must have for the system to be of use</p> <p>Size: This will require generating a CSV/excel file from scratch which will then need to be filled with a large amount of data making it a non-trivial process.</p>
		2.2	Auditor	View Historic data	Check the valid calibration data at the time of an audit	Must Have	M/L	<p>Priority: The client may need to check the calibration data at a particular point in time in order to complete an order so this is must have for the system to be of use</p> <p>Size: Implementing a type of version control is non-trivial and how the data is stored and accessed can come with various complications</p>
		2.3	Admin	Track changes	See who is updating the data and how current the data is	Could Have	S	<p>Priority: This could be useful for finding where and how errors appeared in the system but is otherwise not integral to the core functionality of the system</p> <p>Size: This would only require a small amount of extra data to be stored in the database with every change made and would not interfere with any other parts of the system</p>
		2.4	Auditor	See a list of all calibration tools	Know which tools are up to date on their calibration	Should Have	M	<p>Priority: The core requirement is for the data to be able to be exported from the system. That makes viewing the data in the system not necessary but would still be good to have for various reasons</p> <p>Size: This will require an entire page with non-trivial interactions as each tool has a different set of fields to display</p>
		2.5	Auditor	Receive notifications for expired or soon to be expired calibration tools	Know which tools are up for recalibration	Should Have	S	<p>Priority: Having this functionality will allow admins to be aware of upcoming expiry dates and expired data. Being regularly and automatically informed of these upcoming dates greatly reduces the responsibility of having to regularly check the spreadsheets.</p> <p>Size: Can easily be implemented by regularly querying through different expiry dates within the calibration database</p>
		2.6	Auditor	Search the list of calibration tools	Find a specific tools calibration data	Could Have	M	<p>Priority: Viewing the list of tools is only a should have and the list will not get very long making search the list a lower priority than viewing the list</p> <p>Size: Search algorithms are non-trivial to implement and there is also some challenge in displaying the results in the new order/filter as well</p>
3	Update data	3.1	Admin	Upload spreadsheet data	Add historic /backup data to the new system	Could Have	L	<p>Priority: This would streamline the process of back-filling the data without using the in-built update data functionality, but considering that functionality is a must have, and the spreadsheets are preferably going to be phased out, this would be nice to have only initially and useless later without impacting the functionality of the system</p> <p>Size: Parsing The spreadsheets could come with many problems, particularly if the spreadsheet format is non-uniform</p>
		3.2	Admin	Update a tool's calibration data	Keep the data up to date when it expires	Must Have	M	<p>Priority: The main functionality of the system is to be able to access calibration data more effortlessly for determining radiation dosages of tools. It is vital that the calibration data is updated regularly to ensure that hospitals are providing the correct dosages to their patients.</p> <p>Size: This requires adding relevant data to the database to create a new version of the data while still storing the previous data. The change will then be queued for approval by another administrator</p>
		3.3	Admin	Add a new tool	Keep track of the new tools calibration data	Should Have	M	<p>Priority: This will allow for a new tool to be added to the database in the case that ACDS has to keep track of a new tool.</p> <p>Size: Will require adding a new entry into the database. This might require different fields from the other existing tools which might add complexity to the implementation</p>

		3.4	Admin	Approve new calibrations	Ensure that data is correct before it is used in an audit	Should Have	M	<p>Priority: This functionality allows other users to review and approve the calibration entries submitted by one user, this will improve the quality of entries and minimize risk of errors</p> <p>Size: This introduces additional complexity to the process of inserting an entry into the database, as other users of the same access level must be notified of a pending approval.</p>
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V2.0

Users

- ACDS Admin
- ACDS Auditors
- ACDS Staff represents both admins and staff

Epic ID	Epic	User Story ID	As	I Want To	So That	Size Estimation	MoSCoW Priority	Justification
Manage Accounts	1	CA1.1	ACDS staff	Access the data stored in the database without password	I can improve my work efficiency	S	Must have	This is an important functionality which is the requirement from the client
		CA1.2	ACDS staff	Create a new account	I can use the program and the functionalities provided by the program	M	Should have	This is a future improvement functionality that can allow the new ACDS staff create a new account and use the program but it is requirement of the clients so it is should have and lower priority
		CA1.3	ACDS auditor	log in to the app remotely while possibly on audit and ideally have other apps access this data directly	Make my work more convenient and improve my work efficiency	M/L	Must have	This is an important functionality that can greatly improve the convenience of the application, and also the requirement of the client
		CA1.4	ACDS admin	Control user access level	Limit who can change the data in the database	M	Could have	This functionality can be a future improvement, and it is not the requirement of the client, so it is could have and lower priority
Access and view data	2	CA2.1	ACDS auditor	Load all the information in Excel spreadsheet into the database	I can stop using Excel spreadsheets to record data and instead store them in the database	M	Must have	This is an important and basic functionality that can make auditors view and access ACDS calibration earlier and store the data in the database can be more secure than Excel format
		CA2.2	ACDS auditor	Export data in CSV or Excel format	Use the data in an audit calculation	M/L	Must have	This is an important and basic functionality that allows auditors to export data in the database in CSV or Excel format and it is also the requirement of the client.
		CA2.3	ACDS staff	Some data can be linked to unique pieces of equipment	I can access and view data on other equipment and that will be more convenient and improve my work efficiency	M	Must have	This is an important functionality which allows ACDS staff to access and view data on other equipment, which is the functionality must have and also is the requirement of the client.
		CA2.4	ACDS admin	be alerted when the calibration data is about to expire	I can notice the calibration that is about to expire	M	Must have	This is an important functionality which alert the calibration that is about to expire and lock them, and it is also the requirement of the client
Update data	3	CA3.1	ACDS admin	Track changes of the data in the database	See who is updating the data and how current the data is	S	Could have	This functionality can be a future improvement, and it is not the requirement of the client, so it is could have and lower priority
		CA3.2	ACDS admin	Update calibration data	Can keep the data up to date when it expires	M	Must have	This is an important functionality which allows admin to keep the data up to date when it expires, and it is also the requirement of the client.
Update version	4	CA4.1	ACDS auditor	Be able to access previous calibration data	I can available with which version data is being accessed clearly	M/L	Must have	This is an important functionality that allows the user to be informed with which version data is being accessed clearly and it also the requirement of the client
		CA4.2	ACDS admin	Have permissions to update the next version	The new version can be updated after my permission	M	Must have	This is an important function that allows the admin to review and approve the new version then update it, and also is the client's requirement
		CA4.3	ACDS admin	Add a new tool to the system	I can keep track of the new tools calibration data	M	Should have	This functionality can be a future improvement, and it is not the requirement of the client, so it is could have and lower priority
		CA4.4	ACDS admin	Have new Calibration data be approved before it is used	The data can be available to be exported after admin approval of the new version	S	Must have	This is an important functionality that can make sure the data can not be exported until the admin approve the new version and also is the requirement of the client

V1.0

Epic ID	Epic	User Story ID	As an ACDS	I want to	So that I can	Priority	Size
1	Manage Accounts	1.1	Admin	Create new accounts	Allow new employees to use the tool	Should Have	M
		1.2	Admin	Log in to the system	update the calibration data	Must Have	M
		1.3	Admin	Control user access level	Limit who can change the data in the database	Could Have	S
2	View Data	2.1	Auditor	Export data	Use the data in an audit calculation	Must Have	M/L
		2.2	Auditor	View Historic data	Check the valid calibration data at the time of an audit	Must Have	M/L
		2.3	Admin	Track changes	See who is updating the data and how current the data is	Could Have	S
		2.4	Auditor	See a list of all calibration data	Know which tools are up to date on their calibration	Should Have	M
		2.5	Auditor	Receive notifications for expired or soon to be expired calibration data	Know which tools are up for recalibration	Should Have	S
		2.6	Auditor	Search the list of calibration data	Find a specific tools calibration data	Could Have	M
3	Update data	3.1	Admin	Upload spreadsheet data	Add historic/backup data to the new system	Could Have	L
		3.2	Admin	Update a tool's calibration data	Keep the data up to date when it expires	Must Have	M
		3.3	Admin	Add a new tool	Keep track of the new tools calibration data	Should Have	M
		3.4	Admin	Approve new calibrations	Ensure that data is correct before it is used in an audit	Should Have	M

User Story Map

V2.0

Epics	(Epic 1) Manage Accounts	(Epic 2) View Data	(Epic 3) Update Data
Release 1	(1.2) Log in to the system	(2.4) See a list of all calibration tools	(3.2) Update a tool's calibrations data
			(3.4) Approve new calibrations
Release 2	(1.1) Create new accounts	(2.1) Export data	(3.3) Add a new tool
		(2.2) view Historic Data	
		(2.5) Receive notifications for expired or soon to be expired tools	
Release 3	(1.3) Control user access level	(2.3) Track changes	(3.1) Upload spreadsheet data
		(2.6) Search the list of calibration tools	

V1.0

User Activities	ACDS admin activities			Common activities		
User Tasks	Update the database	Manage accounts	Track change	Create accounts	Log in	Search and export data
Release 1	Can see the new updated data and approve or reject it	Can see the current users and their levels in the database	Can see who and when change the database content	Can create an account by entering username, password and email and then register	Log in after entering correct username and password	Can view all the calibration data
	Upload spreadsheet data	Can change the levels of the users in the database				Can search specific list of calibration data
Release 2	Add a new tool in to the database		Can track the specific content change.	Can create specific types of account (admin or common staff) by entering ACDS company's certificate in the creating interface	Can lead to different pages and have different interfaces after log in according to the account type	Can export the searching results into Excel files
	Upload tool's calibration data					