**Testing protocol for Proteomics-v2 website** [**https://proteomics-v2.cimr.cam.ac.uk**](https://proteomics-v2.cimr.cam.ac.uk/)**.**

* There are 13 tasks in this testing protocols, which will take you about 2 hrs to complete if you were to do this non-stop.
* I don’t recommend doing this non-stop. More than 3 tasks in one sitting is pretty tedious.
* The tasks are best done in the order written.
* Throughout the protocol there are \*\*sentences or question in asterisks\*\* that require an external opinion, or answer.
* If part of the website is failing repeatedly, let me know, but just carry on to the next task.

If you are viewing the website using anything smaller than a desktop monitor, please comment on the page layout, visibility etc.

**TASK ONE (7 mins):** Registering and Logging in as a new PI.

This task tests the registration, log in and password reset functions, as well as all the error messages.

Go to the index page. Navigate to “New User Registration” from the top menu bar.

1) Register yourself using an email address you have access to.

2) Put PI/Project\_Lead for ‘select position’. The next email box should auto-fill from the previous one.

3) Fill in the institute name as anything you want. Choose ‘Cambridge University’ from the ‘select institute’ drop down menu.

4) Omit to give yourself a grant number.

Message “Group leaders from Cambridge University and their researchers must provide at least one grant number and its award year” should appear.

5) Give yourself a grant number (real or pretend) but omit the year.

Message “Please ensure that each grant code has…” should appear.

\*\*Please note if any boxes are emptying themselves after an error message.\*\*

7) Enter everything correctly.

Navigate to ‘Registered User Login’ using the top menu bar and find the header ‘First sign in after registering?’. For testing purposes just use ‘password1234’ for yourself and anyone else you register, so you don’t have to remember different passwords when you log in as different people.

8) In the ‘registered email’ box, enter an email different from the one you just registered.

9) Set you password and then repeat it, in the two password boxes.

Message “No record of this username…” should appear.

10) Now enter the correct email but use “password” instead of “password1234” in both the enter password and repeat password boxes.

Message “please use at least 10 ch….” should appear.

11) Enter the correct email and “password1234” in the first box and ‘password6789’ in the repeat password box.

Message “your passwords do not match...” should appear.

12) Now enter everything correctly.

Message “Your password has been set…” should appear in green.

13) Log in under the “Users with passwords sign in here” header, then log out again.

Pretend you have forgotten your password.

14) Enter you email address in the “Forgotten password?” box (an email address which you have access to).

You should immediately find a link in your inbox.

15) Click on the link and reset your password to something else e.g. “password1235”

16) Check you can log in with this new password. Reset it to “password1234” if you like.

Log out and go back to ‘New User Registration’

17) Try to register yourself again

Message “This email is already in the database, please use another one.” should appear

18) Try registering as a different PI (make up whatever details you need) but input the same grant number as you first registered.

Message “At least one of these grant numbers has already been registered…” should appear.

End of task one.

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**TASK TWO (5 mins):** Getting some group members

Normally group members would add themselves but, in order to test all the user options, you’ll have to make your own group.

1) Fill in the details for a group member from Cambridge University but make sure to enter the PI’s email (i.e. your email) incorrectly.

Message “The group ID needs to match either the current PIs email or a group ID already in the database.” should appear.

2) Now fill in all the details correctly but omit any grant number or date.

Message “Group leaders from Cambridge University and their researchers must provide at least one grant number and its award year” should appear.

\*\*Should CU group members be allowed to join without specifying a grant number (given their PI will have already provided at least one if they’re an internal PI)?\*\*

3) Now make yourself at least two group member with all the details correct.

4) Go to ‘Registered user login’, set their password to ‘password1234’, log them in and then out again (no this right away before you forget what email you made up for them!).

End of task two

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**TASK THREE (3 mins):** User home page, adding a new grant and reading the advice page.

1) If your own user details don’t have Cambridge University as the institute type, make yourself a PI-Project Lead user-identity that does, register that identity and log in with it, as per the previous two tasks.

You’ll arrive at the User Home Page.

From here, users can do all sorts of useful things (add grants, submit requests, track samples, view data…). Users with admin or finance privileges can view yet more pages. You will give yourself these privileges later.

2) Click on both the ‘Finance’ and ‘Facility’ links in the top menu bar. Access should be denied (we will change this in a later task).

Navigate to ‘Add grant’ on the top menu page or on the page body ‘Cambridge University users can add new grants HERE’.

3) Add a grant code with a ‘,’ in it.

Message “please match the requested format” should appear.

\*\*will this be a problem – do any real life grant numbers contain commas?\*\*

4) Experiment with other mistakes e.g. 3-digit years. Each should produce an informative error message.

5) Add the following grant code with any (correct) year: Athal/grant1

Message “This grant number has already been registered…” should appear

6) Add a grant correctly, note the message, and return to User Home.

End of task three

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**TASK FOUR (12 mins):** Making a request.

This task assumes you have created your own user id, as per the previous tasks. If you haven’t done the previous tasks, you’ll have to create a user id, set a password and log in. You will need to use a real email address to which you have access.

1) Navigate to the user home page and take a look at ‘Request Advice’. The main question I get is about protein concentrations from IPs or gel bands.

\*\*Are these questions addressed adequately here? What else could be usefully added?\*\*

2) From the user home page, using the top menu or the page button, go to ‘Request Form’.

Imagine you want to request an experiment which consists of two immuno-precipitation samples, plus one gel lane that you want cut into 4 sections and then a band from a gel you’ve run and cut out yourself. You want some custom analysis on the IP samples, the 4 sections searched against 3 databases and just the .raw file from the gel band.

3) Without questioning why anyone would cram all this under a single experiment code, try and fill out the form for such an experiment, then click ‘submit all’.

Even for a pathological example such as this, the request process should be self-explanatory and intuitive \*\*but is it?\*\*

\*\*Is it sufficiently obvious that protein concentration is a required box (#1 mistake is leaving it blank)?\*\*

\*\*If you didn’t submit your sample successfully the first time, what went wrong?\*\*

\*\*Are the check boxes for methods too jargon-y? What could be better?\*\*

4) Check your email. You should find a new email titled with your experiment code, summarising what you just requested.

\*\*Did all the information auto-fill correctly?\*\*

\*\*Is there anything more/less you’d like to see in the email?\*\*

5) Return to the request form by selecting ‘Request Form’ from the top menu.

6) Fill in the form for a new request, this time for just one gel-band ID type of sample. Check the in-gel digest box but select “Samples only” as the experiment type. Click submit all.

Message “You have not requested benchwork but...” should appear

7) Make sure that you have requested bench work in the experiment type menu. Now untick the in-gel digest box and click submit all.

Message ‘If benchwork was requested, make sure…’ should appear.

8) This time select benchwork, check the in-gel digest box but leave the protein concentration blank.

Message ‘Please check for missing protein concentrations, injections, repeat...’ should appear.

9) Check in-gel digest, fill in protein concentration but make sure ‘number of injections’ is blank.

Message ‘Please check for missing protein concentrations, injections, repeat...’ should appear.

10) Then submit this sample correctly.

11) Lastly, submit one data-only request.

12) Check you email account again. There should be a confirmation for all the subsequent requests.

\*\*Did all the information auto-fill correctly for each type of request?\*\*

In general:

\*\*What bits of the request form were confusing?\*\*

\*\*Did you notice the advice messages when you hovered your mouse over some parts of the form?\*\*

\*\*Were the error messages helpful in completing the form correctly\*\*?

\*\*Does the request-confirmation page make sense, whatever type of request you made?\*\*

End of task four

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**TASK FIVE (10 – 15 mins):** Testing out the different access levels.

This website is designed to be used by different sets of people; finance or managerial staff, facility staff and facility users. The first two groups need access to the control pages, whilst only facility staff get to update experimental details. Facility staff can set anyone’s access level from the control pages.

In order to test the functions for accepting and updating incoming requests, you must first log in as an administrator and set your access level to ‘ADMIN’.

If this is the first task you have tested, please register, set password and log in as per task 1.

1) Log out and log back as ‘jess\_s[mith@](mailto:JessSmith@email.com)cam.ac.uk’ with ‘password1234’.

2) From the user home page, click on the greyed-out ‘Facility’ link in the top menu bar.

This will take you to the facility home page. Don’t worry (for now) about the end-of-quarter countdown or the experiments requiring updates.

3) Click on ‘Add/Modify users, then scroll down to the ‘Modify a user’ section.

4) Select your (not Jess’s) email form the left-most drop down menu.

5) Use the pre-set drop-down values to select your first and last name.

6) Under ‘select level’ choose FINAN.

7) Fill in the other options without changes, ignore the grant section and click ‘modify user’.

8) Log out as Jess Smith and log back in as yourself. You should now be able to access the Facility Home page and Finance Home page, via the greyed out ‘Facility’ and ‘Finan’ options on the User Home top menu bar,

Understandably, facility staff don’t want finance or managerial staff updating or signing off expenses – but they do need to be able to send reminder emails and view expenses. These functions are found within the ‘Facility’ pages, along with the functions that update experiments.

9) From the facility home page, try clicking on all the buttons that change an experiment’s status (after selecting an experiment from the appropriate dropdown). You shouldn’t be able to access any of the subsequent pages.

10) Now try clicking on the buttons for emailing facility staff if experimental updates are overdue. The website is currently programmed to send the reminder to the email address of whoever is currently logged in. Assuming you’re using a real address, have a look at the reminder email.

\*\*Is it useful, informative etc.?\*\*

10) Now investigate the top menu links. Test that you can access ‘Query DB’ , ‘Finance Home’ and ‘Facility Stats – but not any of the others. If you do get to any other page, let me know! ‘Finance Home’ and ‘Facility Stats’ will be tested in a subsequent task.

11) Go to ‘QueryDB’ and investigate the different tables by clicking on the buttons at the bottom of the page. Test how you get can a selective views of the tables by using the drop down menus.

12) Log yourself out and log in as ‘jess\_s[mith@email.com](mailto:JessSmith@email.com)’ with ‘password1234’ again.

13) Go to Facility Home and find your actual user id in the ‘Modify a user’ section. Fill in everything unchanged, as you did before, but change your access level to ‘NONE’.

14) Log out as Jess and log back in as your real self.

15) See what pages you can access now that your user level is none. You shouldn’t be go further than User Home. If you can, let me know!

16) Log out, log back in as Jess and set your access level back to ADMIN for the next set of tasks.

End of task five

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**TASK SIX (5 – 10 mins) :** Accepting incoming requests and investigating their status in the database

Using your new admin privileges, log in and go to the facility home page. If you haven’t completed previous tasks and you don’t have admin privileges, log in as ‘jess\_s[mith@email.com](mailto:JessSmith@email.com)’ with ‘password1234’.

Navigate to ‘Facility Home’.

A series of experiments have been added (test1 – test10) so website testers can investigate the request-update procedures. Choose one of the remaining ‘test*n*’ experiment that you can see in the dropdown to be the one you work with in this task.

1) Open the drop-down menu under the New Requests header and fail to select any of the experiments.

2) Click ‘view request details’.

Message “you must select an experiment” should appeared

3) Select one of the ‘test1’ to ‘test10’ experiments this time and click ‘view request details’ again.

4) Look over the request details, then click ‘mark as arrived’.

\*\* don’t mark any others as arrived, otherwise other testers won’t find them in the dropdown menu \*\*

5) Refresh the facility home page.

That experiment has disappeared from the New Requests dropdown list. What if you wanted to view the request details again?

6) Click ‘Query DB’ in the top menu bar.

This takes you to the database viewer. Here you can view all details for requests by user or by experiment.

7) All the ‘test..’ experiments were submitted by Jess. Type Jess into the box under the ‘Find the user that you want to query’ header – but don’t click the button yet. Note that two Jess’s have appeared. If you’re searching by first name only (or if there are users with the same first and last name), all options that match what you entered appear. Clicking on each option reveals their unique email.

8) Select ‘[jess\_smith@cam.ac.uk](mailto:jess_smith@cam.ac.uk)’, click ‘query this user’ and look up all the details from whichever ‘test…’ experiment you’re working with.

9) Under the ‘Find the user and their experiment…’, investigate which users in the database come up after typing in the letter m. Select ‘minnie mouse’, they choose any of the three experiment codes that have appeared in the next door dropdown menu. Click ‘query this user’s experiment’ .

As you scroll down, you will start to get an idea of the database structure; the number of tables, different table contents, varying table input for different entry types etc. Note how different experiment types initiate entries in some tables but not others: all get an expense entry, but unless/until bespoke data analysis is requested, there is no entry in the data request table.

10) Go back to ‘Query DB’ and try clicking on the individual table buttons. This should bring up views of the entire tables within the database.

11) Go back to ‘Facility Home’.

12) From the ‘Update an Experiment Request’ section, select experiment ‘notarv’ and click on any of the ‘add…’ buttons in this section.

Message “please select as experiment that has been marked as arrived” should appear.

**Don’t mark this one as arrived, please let it in this state for subsequent testers!**

The idea is that all incoming experiments are processed in the following order:

marked as arrived > benchwork (if requested) added > instrument methods (if requested) added > database search (if requested) added > extra analysis added if needed (independent of original request)

Updating the contents of an experiment is dealt with in the next task.

End of task six

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**TASK SEVEN (15 mins) :** Updating requests. You’ll need to have done task 6 first.

1) Under the ‘Update an Experiment Request’ header, select the ‘test…’ experiment you were working on in task 6.

2) Click on ‘add instrument details’.

Message “ select Facility Home from the top menu, then add bench methods before…” should appear.

If a user has not requested any benchwork, it’s possible to go straight to the instrument methods section but if benchwork is selected, it must be completed first.

3) Re-select the same experiment and click ‘add bench methods’.

4) From the information in the header text and the table, it should be obvious which method is required.

\*\*But is it obvious?\*\*

\*\*Are the list of available bench methods understandable?\*\*

\*\*Is anything missing?\*\*

5) Select ‘gel\_cleanup\_whole\_sample\_usergel’ from the bench method dropdown menu.

A common error is that users who want one gel lane cut into 4 sections for in-gel digestion only estimate 1 injection instead of 4. Indeed, this is what has happened here.

6) Under user-estimated injections…’ drop down menu, select 4.

7) Before you click ‘send benchwork methods to the database’ make sure you deselect any bench methods so the input box reads ‘needs methods’. Now click ‘send benchwork methods to the database’

8) Note the message. The updated number of injections should stay the same i.e. 4. Let me know if it hasn’t!

9) Select ‘gel\_cleanup\_whole\_sample\_usergel’ once again, and click ‘send benchwork methods….’

10) Now you need to record how long the benchwork took. Select this experiment from under ‘Update an Experiment Request’ once more and click ‘add bench hours’.

11) Add 199 hours and click ‘add or subtract hours’. Now you’re back at Facility Home.

12) On reflection, 199 hrs is a bit much. Click ‘add bench hours’ again after re-selecting this experiment in the dropdown menu. Enter -198 in the ‘current entry’ box and submit this. You should automatically return to Facility Home.

13) Reselect the experiment and click ‘add bench hours’ once more. The ‘previous entry’ box should show a more reasonable 1 hr.

14) Return to Facility Home. From here, select the experiment once more and click ‘add instrument details’.

You should find yourself at the ‘instrument details’ page. There are four rows for one experiment so you have the option of adding new methods if the user wants their samples run again.

For the sake of demonstration, let’s imagine an overly complex experiment where the 4 gel chunks are all run

with the ‘wholeSample\_fromGel(90)’ method. The data is searched. The user then wants 2 chunks re-run with a longer gradient. The data is searched again. Finally, the user decides they’ve been using the wrong database all this time and want everything searched against another species (without anything extra going on the instruments).

15) So...select WholeSample\_FromGel(90) from ‘needs methods1’. Set ‘no. injections 1’ to 4. Set ‘washes 1’ to 4.

\*\*The numbers in brackets are the chargeable minutes for each method. Are these OK? \*\*

\*\*Are the actual methods themselves adequate or do we need more/fewer?\*\*

16) db search yes/no should have default to ‘Yes’ is the user requested this. Let me know if this has not happened. You can still change it, whatever it is set to, as users sometimes mis-request database searching. Set it to ‘Yes’.

17) Under ‘instrument method 2’ select a long gradient e.g. SingleGelBand(120). This is a 120 min gradient. Then set ‘no. injections 2’ to 2. Set ‘db search yes/no’ to ‘Yes’. Set ‘washes 2’ to 2.

18) When it comes to re-searching all the data with a different database, set ‘instrument method 3’ to repeat DB search(0), and set injections and washes to 0. Set ‘db search…’ to ‘Yes’.

At this point you should have 3 of the 4 rows filled, but only the the first 2 with injections and washes.

19) Click ‘submit instrument methods’.

\*\*Is this way of updating instrument methods and DB searches sufficiently convenient for long-term management?\*\*

If successful, you should be brought back to the facility home page.

20) Double check everything was updated as expected. Using the functions that you investigated in task 5 for interrogating the database, check that everything for this experiment has been updated as expected.

21) If you’ve submitted your own experiments in previous tasks, you can go through the update procedure with these experiments, then examine the associated expenses and sign them off as complete is subsequent tasks.

End of task seven

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**TASK EIGHT (4 mins):** Adding extra analysis hours and extra costs

It is very often the case that the user doesn’t know whether they want additional analysis until they’ve submitted the request and got their data back. For this reason it is possible to add bespoke analysis to any type of experiment at (almost) any moment.

1) Return to Facility Home and select the same experiment as you’ve just been working with under the ‘Update an Experiment Request’ section. This time click on ‘add bespoke analysis hours’.

You should find yourself at the ‘python\_hours’ page.

\*\*Note the quarter-end countdown has reappeared. Robin is the one who signs off all requests that included instrument time. Harriet can add data-hours to these experiment after he’s signed them off - but only if it’s before the end of the quarter (otherwise accounting dates get confusing). If Harriet cannot finish the bespoke analysis in time for a request that Robin is responsible for signing off, she gets a message prompting her to submit the hours as a new request. \*\*

2) Add 3 hours and click ‘add or subtract hours’. Now you’re back at Facility Home.

3) Finally, select the same experiment under the ‘Update an Experiment Request’ section. This time click ‘add extra costs’.

4) This should take you to the ‘extra\_costs’ page. Stick a racehorse, Ferrari, whatever you think you can get away with on their account and click ‘submit extra costs’.

End of task eight

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**TASK NINE (5 mins)**: Viewing and signing off expenses. You’ll need to have completed tasks 5 and 6 first.

1) Navigate to Facility Home and find the ‘View and sign-off expense details per experiment’ section at the bottom of the page.

2) Select experiment [jess\_smith@cam.ac.uk](mailto:jess_smith@cam.ac.uk)\*incmp1 from the dropdown menu

Message ‘you must update some experimental details…’ should appear.

\*\* **don’t update anything in this experiment, it needs to stay incomplete for the other testers** \*\*

3) Select experiment [jess\_smith@cam.ac.uk](mailto:jess_smith@cam.ac.uk)\*signd1 from the dropdown menu

Message ‘'This experiment has already been signed off…’ should appear.

Additional data analysis is the most common thing that needs to be added retrospectively – sometimes months later. What if this experiment has already been signed off by Robin?

4) Scroll right down to the bottom of ‘Facility Home’ and note the possibility for modifying historical records. Experiments from previous quarters aren’t kept in the same dropdown menus as above, or else they become cluttered. Mostly, you won’t be able to modify a record if it has been both signed off and comes from a previous financial quarter. However:

* you can add or subtract bench hours from any experiment, as these don’t affect finances.
* you can do anything to an old experiment that has not been signed off

5) Select experiment ‘at1’ (first in list) from the historical records drop down, then ‘python\_hours’ from the modification menu.

Message “This experiment has been signed off and originates from a previous quarter. Additional analysis hours must be added as a separate, data-only request.” should appear. It is possible to add requests on behalf of users; this is covered in a later task.

If ‘at1’ had not already been signed off, you’d have been taken to the ‘python\_hours’ and would be able to add hours as described previously.

6) Back at Facility Home, select your ‘test…’ experiment from the ‘view and sign-off expense...’ dropdown again. Click ‘view expenses details’.

7) Using the info about the user and the info under the green tables headers, can you come to the same summed expenses as are reported at the bottom of the page?

\*\* The idea of this page is to make the expense calculations per experiment as clear as they possible can be, so facility staff can go through this with any user that questions their expense. \*\*

\*\* Is it as clear as could be? \*\*

\*\* If you do the maths by hand (pricing scheme is on the ‘finance’ page) do the numbers come out the same as at the bottom? \*\*

Normally a sign off would only be permitted for experimental work if you were using Robin’s email and for bespoke data analysis of you were using Harriet’s email. For testing purposes I have changed this to whatever the current user’s email is.

8) If you’re satisfied all is correct, click on “confirm and commit experimental work”. This should take you back to facility home.

9) In the database are some data-only requests that have not been signed off (data1, data2 etc.)

Select one from the ‘view and sign-off expense...’ dropdown. Repeat the above process but this time click ‘confirm and commit bespoke analysis work’.

10) Go to ‘Query DB’ and this time click ‘get EXPENSES SUMMARY table’ at the bottom of the page.

This shows you a replica of that table in the database. Using Ctrl+F find the experiments you just signed off.

The columns ‘bench\_instr\_db\_signoff’ and ‘python\_signoff’ should show the year and quarter appended to your email address is the appropriate columns.

End of task nine

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**TASK TEN (15 mins) :** Modifying requests, modifying users, adding experiments, deleting experiments.

\*\* You will need to submit experiments for this task, so it’s advisable to complete the task four if you haven’t already done so. \*\*

1) Log in as one of your group members. If you haven’t completed any of the previous tasks, you’ll need to registered yourself as a group leader, set yourself a password and log in at least once. Then log out, create a group member for yourself, set password and log in as them.

2) Submit an experiment of any type except for ‘Data-only’, when logged in as one of your group members. Have at least two samples in the experiment. Make a note of the user, experiment code and sample codes.

3) This group member wants to change their first name. Log in as yourself (you’ll need admin privileges, so log in as [jess\_smith@cam.ac.uk](mailto:jess_smith@cam.ac.uk) if you have not made yourself an amdin in a previous task). Navigate to ‘Facility Home’ and click on ‘Add/Modify Users’ in the top menu bar.

4) Under ‘modify a user’ header, select the email address of the group member you just created. Then start typing a new first name for them. Their last name stays the same, so select it from the dropdown rather than typing it in (the dropdown selection is not compulsory but avoids introducing errors).

5) Set their access level to anything except ‘NONE’ and set their position as ‘Researcher’.

Set the group leader’s email, the institute name and institute type to whatever they were before.

6) Click ‘modify user’. If you get the group leader’s email incorrect and it doesn’t correspond to one in the database, an error message will show.

7) Then head to ‘Query DB and verify that their first name has changed by clicking ‘get USERS table’, then finding their new name.

This user is a bit hopeless; they want to submit an experiment request but they can’t get their head around the request form. You’ll have to do it for them.

8) Navigate to ‘Add Expt’ in the top menu bar of the facility pages. Find your newly-named user in the dropdown, select their email and click ‘select this user’.

9) You should end up at a form that looks similar to the main request form, but with fewer explanations.

Fill it in for an experiment type requiring benchwork, **make at least two samples** and click ‘submit all’.

10) This hopeless user gave you the wrong information for one of the samples. Navigate to ‘Delete Samples’ in the top menu bar, then fill in the required info to find this experiment in the database.

11) Neither of these samples have been associated with any methods i.e. they haven’t been processed in the facility in any way, so they are fine to delete. Set one sample to ‘Y’, the other to ‘N’, then click ‘delete the selected samples’.

12) Go to ‘Query DB’ and check you can still find the experiment in the EXPT REQUESTS table, SAMPLE REQUESTS table and EXPENSES SUMMARY table, and that only one sample is showing in SAMPLE REQUESTS.

13) It turns out that the information was incorrect for both samples. You can’t selete a sample from a single-sample experiment. Instead you have to delete the whole experiment. Navigate to ‘Delete Expt’ in the top menu bar, find the users details and experiment code, then click ‘delete this experiment’.

14) Go back to Query DB. You shouldn’t be able to find any trace of this experiment.

This group member is so bad, you decided to both employ an extra student and ban the hopeless user from accessing the database.

15) Navigate to ‘Add/Modify Users’. Add yourself a new group member with access level ‘USER’ under the ‘add new user’ section. Give them their own grant (or your group grant) and year, if they’re a Cambridge University user. If you don’t have a CU user a grant number, this will generate an error.

16) Find your hopeless user in the ‘modify a user’ section. Keeping all other details the same, change their access level to ‘NONE’.

17) Log out as yourself (or Jess) and log in as your hopeless group member. Try to access user, finance and facility pages and see what happens. You shouldn’t be able to access any page where you view or submit data. Let me know if you manage to!

End of task ten

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**TASK ELEVEN (4 mins):** Viewing and downloading information from a users perspective

Users can view proceedings at the ‘Track Progress’, ‘Group Expenses’ and ‘Group data’ pages. These are accessed from the top menu bar of the User Home page or the main body of this page.

1) If you have not completed created yourself and ID with admin access, or requested experiments in earlier tasks, log in as [jess\_smith@cam.ac.uk](mailto:jess_smith@cam.ac.uk) using password: password1234.

2) Click on ‘Track Progress’ and select any experiment from the dropdown menu.

Then click ‘view progress and costs’ and examine the corresponding entry in all the database tables.

3) Click on ‘Group Expenses’. This shows most of the columns from the expenses summary for all the experiments requested by all of your group members.

4) If you have created group members for yourself in previous tasks, and submitted experiments as a group member, log in as one of your group members rather than a group leader. If not, note the email of any of Jess’s group members. Their password will be password1234. Log in as them.

5) Examine what is visible to group members compared to group leaders on the ‘Group Expenses’ page. You should see, if this is working properly, that group leaders can see expenses for all their group members but group members can only see their expenses. Please let me know otherwise!!

6) Lastly, click on ‘Group data’.

7) Read through the text on the page. Is it sufficiently clear how this works? Does it seem reasonable? Is 4 weeks too short/long before data gets transferred to ‘Old Data’?

End of task eleven.

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**TASK TWELVE (10 mins)** : End of financial quarter deadlines

1) Make sure you are logged in as someone with admin access privileges. If you haven’t set this for your own ID in a previous task, log in as [jess\_smith@cam.ac.uk](mailto:jess_smith@cam.ac.uk) with password1234.

2) Navigate to Facility Home. Take a note of the number of day to go until the end of the financial quarter.

Experiments ‘belong’ to the quarter the instrument work was done in. So, if the dates on the invoice are to agree with the date the mass spec was run, you need to have all the bench work, mass spec work and analysis updated and signed off by the end of the quarter.

It’s no disaster if this doesn’t happen for a handful of experiments submitted close the the end of the quarter but you don’t want the ‘updates are required’ list to hold more than a few requests.

By and large, John is responsible for benchwork updates, Robin for instrument updates and Harriet for analysis updates.

3) Try sending a reminder to about the not updated experiments by clicking on any of the ‘email\_x’ buttons if you have not done this in a previous task.

The website is currently set to send this to the current user. If you’re logged in as jess\_smith, you won’t get this email as her address is fake but if you’re logged in as your real identity, take a look at it.

\*\* Is this a useful email to receive? Should anything be added to it? \*\*

4) Choose one (only one!) of the experiments starting ‘23….’ . These experiments have been given fake request dates from 2023, so you’ll need to find them under ‘modify historical records’ , right at the bottom of ‘facility home’.

5) Go through the options in the ‘modification’ dropdown until you find what it was that needed updating (most likely bench methods, instruments details or both) and update it however you think best.

\*\*If you haven’t done any of the previous tasks using the update pages, was it fairly self-evident what needed to be done?\*\*

6) Return to facility home and examine the ‘updates are required…’ lists at the top of the page. The experiment that you updated should have disappeared from the ‘benchwork not updated…’ and/or ‘mass spec not updated for...’ lists. It should only be present in the ‘mass spec not signed off…’ lists.

7) After you’ve finished all the required updates, scroll back down to ‘modify historical records’, make sure the same experiment is selected and click on ‘signoff if update complete’.

\*\*When you return to facility home, has it disappeared from the ‘mass spec not signed off...list? Let me know if it hasn’t, because it should have done!\*\*

8) Navigate to ‘Finance Home’ in the top menu bar.

9) Read the bullet points describing the grouped and ungrouped tables. The idea is that the finance department will only want the short, grouped version, whilst the longer one is kept for facility records.

\*\* Do both long and short version contain the right level of information for their respective purposes? \*\*

10) Note which experiment codes haven’t been signed off yet, then go to the dropdown menu.

11) You choices are the previous financial year or the current year. In the dropdown menu are the dates describing the financial years. Let me know if they are not correct!

12) Choose ‘last financial year…’, make sure ‘group Y/N’ is set to ‘No’, then click on ‘View/Download this info’.

13) Examine the tables displayed on the screen

\*\* Is there anything you would add/remove/reformat? \*\*

14) Under the ‘download spreadsheet of this table’ header click ‘ungrouped’. Find the table in the proteomics finance folder.

15) Go back to Finance home and repeat this process but with ‘group’ set to ‘Yes’

\*\* Is grouping a useful addition? \*\*

End of task twelve

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**TASK THIRTEEN (3 mins)**: Viewing and downloading facility usage information

1) If you have completed earlier tasks and have given yourself admin privileges, log as yourself, otherwise log in as [jess\_smith@cam.ac.uk](mailto:jess_smith@cam.ac.uk), password1234.

2) Navigate to the facility pages, then click ‘facility stats’ in the top menu bar.

3) Use the dropdown menus to look at all sorts of different plots.

\*\* Is it self-evident how the data is being grouped? \*\*

\*\* Is there anything missing from the plots? \*\*

4) Try downloading a few of them and opening them.

End of task thirteen

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**TASK FOURTEEN (6 mins)**: Updating core information for both Finance and Facility staff

Core information consists of the bench methods, instrument-datasearch methods, minutes taken for methods, price per minute for an activity and price per institute type. NB this doesn’t cover everything. It’s not possible to update the number of activities types (these are fixed at bench, instrument-datasearch, bespoke analysis) or the number of institute types (fixed at Cambridge, other university, industry). There’s also no current way of accessing the orphan tables mentioned in the Readme e.g. instrument type because that requires remodelling of the website and probably the database, too.

Nevertheless, you can achieve a lot of change with what’s written in so far. Just be aware that if the database gets reinitialised, values will default to the 2024 values that are auto-written to the database when the tables are created. Defaults can only be changed in models.py.

1) Make sure you’re logged with an identity that has full admin access

2) Navigate to the facility pages, scroll down to the pricing scheme. You should see an ‘update the pricing’ button on the right. Click it.

3) You should arrive at the update\_prices page. Scroll down and note what tables are there.

4) Have a go at updating some minutes for methods, some prices per minutes and then some prices per institute.

5) Then , in the top menu bar, note the ‘Add Methods’ option. You’ll need full admin access for this; it shouldn’t work if you just have financial access. Click it.

6) This should take you to the ‘Methods’ page. Note the red warning message. If I had more time, I make a delete method function – but it’s less straightforward that the add method function (already non-trivial).

7) Try adding a new option for each table.

8) Now go all the way back to User Home and add a new experiment request with benchwork, samples and a database search. All you new options should be present in the dropdown menus in the request form.

9) Try updating your all-new request (mark as arrived, then benchwork, then bench hours, then instrument methods etc. ). Your new options should be present in any dropdowns or auto-filled fields for all the update pages.

10) When you view and signoff the expenses, the new prices should be automatically calculated from whatever minutes you added for the bench, instrument and data-search methods.

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