

Cat Logistic Appointment and Work Scheduler (CLAWS)

S2a - Conceptual Design Document

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Executive Summary

The Cat Logistic Appointment and Work Scheduler (CLAWS) is a web-based system designed to expedite the normal operations of Purrfur Cat Grooming and Kenneling. CLAWS will be hosted online, providing a common portal for customers and employees of Purrfur. The main

features of CLAWS are the following:

- CLAWS provides scheduling for cat grooming and kenneling appointments. Customers
 can create, modify, and delete appointments for their cats through CLAWS; employees
 and managers can get a full listing of all booked appointments, and can also create,
 modify, and delete appointments.
- CLAWS maintains an employee schedule, which can be edited by Purrfur staff managers. Employees can view the schedule.
- The Cat-a-logue, a pictorial listing of products Purrfur sells in-store with pricing information. The Cat-a-logue is only for browsing; CLAWS provides no methods for customers to purchase items.
- Logs are kept for kenneled cats using CLAWS. Employees update the logs with relevant information, and the customer can access the logs to check up on their cats.
- The Catcam service allows customers to view a live video stream of a cat they have kenneled with Purrfur through CLAWS. Customers can opt into the Catcam service for an extra fee.

User accounts determine which sections and actions are accessible to which users. Accounts are available for customers, employees, and managers of Purrfur.

The customer account is the most basic of the three.

- Customers create accounts through the registration form on the main CLAWS page.
- Customer accounts must be validated by employees before becoming active.
- Customers can reset their passwords if lost or forgotten.

Customers logged in with a valid account can access the following pages:

- "Home". The customer dashboard; provides basic instructions on how to navigate the CLAWS interface.
- "Cat-a-logue". A full-page version of the Cat-a-logue.
- "Create Appointment". Provides a form that customers can use to book either grooming
 or kenneling appointments. Grooming appointments are booked by the hour on a single
 date; kenneling appointments are booked with a start date and an end date. Customers
 must also provide the name of their cat, and can provide special considerations if they
 wish. CLAWS sends confirmation emails to the customer upon appointment creation or
 modification.
- "Appointments". Shows a list of appointments the customer has booked. For any kenneling appointments, the customer can access the logs or Catcam. Customers can also modify or delete their appointments, but not within 48 hours of the appointment's start time.

The employee and manager accounts are reserved for employees of Purrfur.

- A single employee account is created initially. All Purrfur employees share this account.
- A single manager account is created initially. All Purrfur managers share this account.

Employees and managers logged in to CLAWS can access the following pages:

- "Home". The employee dashboard; provides basic instructions on how to navigate the CLAWS interface.
- "Cat-a-logue". A full-page, editable version of the Cat-a-logue.
- "Appointments". Shows a calendar of booked appointments through the "View Appointments" sidebar menu item. For any kenneling appointments, employees can update the logs or enable the Catcam. Employees and managers can also create,

modify, or delete appointments through the "Create Appointment" sidebar menu item.

- "Scheduling". Shows the employee schedule as a calendar. Only managers can add, modify, and delete shifts.
- "Accounts". Shows a list of new (pending) customer accounts; employees and managers can activate or deny these accounts.

Anonymous users can only access the main page of CLAWS, which provides a form for logging in and a form for registering for a new customer account. The main CLAWS page also displays the Cat-a-logue.

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1.0 Introduction

The Cat Logistic Appointment and Work Scheduler (CLAWS) provides a full-featured, self-contained schedule and appointment management solution for Purrfur Cat Grooming and Kenneling. CLAWS allows customers to book appointments online with no interaction from Purrfur staff. CLAWS also allows employees and managers to modify these appointments and control bookings based on availability of staff, reducing the need for logistical work and allowing

employees to focus on the needs of animals in the care of Purrfur.

CLAWS provides a full appointment management system, accessible by both customers and employees. A customer with an account can book appointments for both grooming and kenneling, providing any special needs their cat has or any extra information that may be required. These appointments can then be accessed by the employees, allowing them to prepare for upcoming appointments as needed. The appointment system will also interact with the employee schedule, ensuring that there are enough employees working to handle all appointments.

A customer account provides access any appointments under that customer's name, whether past, ongoing, or upcoming. Through this appointment, the customer will also have access to the Catcam service (if purchased) and a log of activity involving their pet. The Catcam allows the customer to see their pet and know for certain that everything is alright. The logs provide detailed information about interactions with the cat while under the care of Purrfur, and provides another level of peace-of-mind for the customer. This log is filled out by the employees that are working and it is up to their discretion what information be included.

The employee schedule is controlled by the manager, allowing the manager to schedule employees and define the availability of appointments on different days. This schedule is accessible to the employees, allowing them to access their work schedule from home (or elsewhere). This allows employees to always be aware of their hours, and reduces the chance of missed shifts.

Another major part of the project accessible to all visitors is the Cat-a-logue. This is a listing of products available in store, controlled by Purrfur employees and viewable by any visitor to the website. This provides Purrfur with an online retail identity, allowing potential brick-and-mortar customers to see what is available without having to leave the comfort of their homes.

The CLAWS solution is a great logistical tool for Purrfur, streamlining the booking and appointment management system, as well as ensuring employee availability meets customer needs. The system will provide easily accessible information to the customer about their pets, available anytime, from anywhere, and allow easy management of employee schedules.

2.0 Cat-a-logue

The Cat-a-logue will be visible from most areas of CLAWS; specifically, it will be present in the welcome and home screens, the customer and employee dashboards, and the Cat-a-logue view itself. These views are distinct and will be explained in later sections. The main function of the Cat-a-logue is to provide availability and pricing information about relevant products to the customer.

2.1 Cat-a-logue View

This view is the full display and the main Cat-a-logue view. This is a standalone view and can be accessed from the navigation bar seen in Figure 1. The view will be slightly different depending on context. For example, when a customer is logged in, the view will be read only, and focused on simply displaying information, whereas when an employee or manager is logged in, the view will be in an editable state, allowing for addition and deletion of entries in the Cat-a-logue.

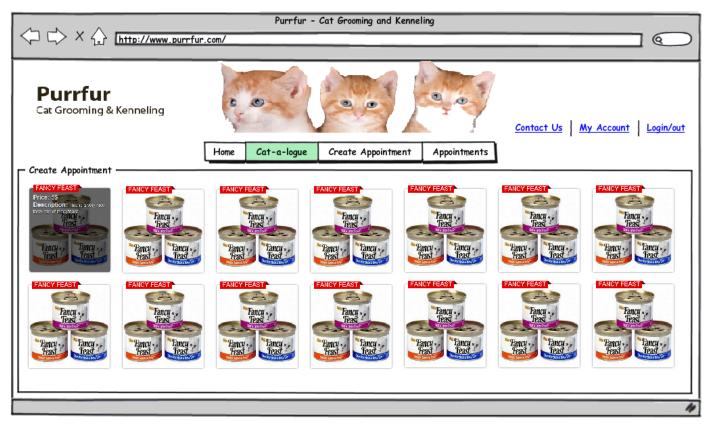


Figure 1 - The Cat-a-logue view in the customer context.

2.2 CLAWS Home Page View

The Cat-a-logue visible in the CLAWS home page is a full display of the products that Purrfur sells, taking up the lower part of the page. This view is very similar to the view shown in the actual Cat-a-logue view.

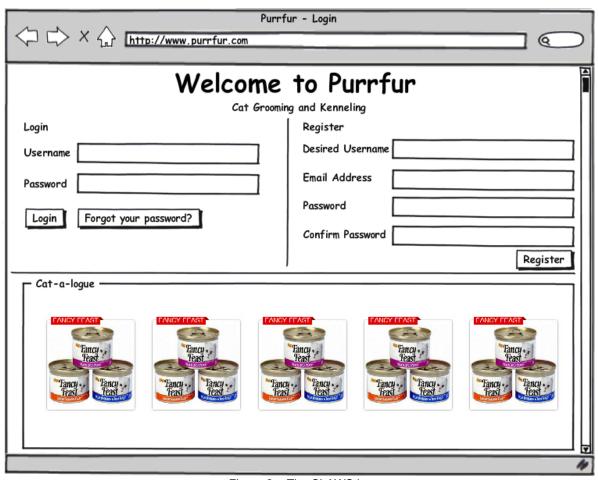


Figure 2 - The CLAWS home page

2.3 Dashboard View

The dashboard view is the third and final type of view for the Cat-a-logue. It is a smaller, more compact version of the Cat-a-logue. It is simply a sidebar that is present in all views of the dashboard, with a list of products specified by and employee or manager. The ordering in the Cat-a-logue dashboard view is by most recently created. The Cat-a-logue dashboard view is always shown to logged-in customers, but hidden by default for the employee and manager roles, and the space it takes up is replaced with functional buttons for managerial actions.

2.4 Information Shown

The Cat-a-logue is a simple list of the products that are available to purchase in store. It offers an aesthetically pleasing method of marketing products to the user through pictures, short descriptions of products, and prices. Below is an example of an item from the Cat-a-logue.







Figure 4 - Cat-a-logue item, mouse hovered

2.5 Contextualization

As the user context changes (which kind of user is logged in: customer, employee, or manager), so does the Cat-a-logue. When accessed by an anonymous user or a customer user, the Cat-a-logue is read only; however, when accessed by an employee account or manager account, the Cat-a-logue is changed to an editable state. This adds the following actions:

- Delete products
- Update product info
- Add new products.

A figure that shows the Cat-a-logue under this context is displayed below.

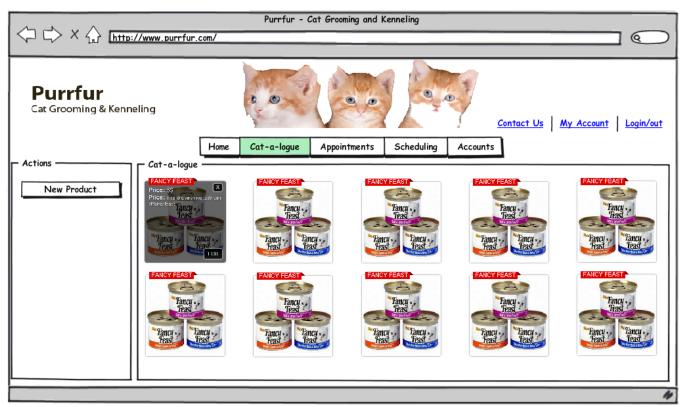


Figure 5 - The Cat-a-logue page in the manager/employee context

Below are the pictures outlining the Add / Edit product dialogs that are presented when an employee clicks the corresponding actions..

Add Product		
Name :		
Price :	\$	
Icon :	C:\fakepath\image.png Browse	
Description :		
Enter the description here		
	Cancel Save	

Figure 6 - Add/Edit Product Dialog

3.0 Accounts and Account Management

CLAWS keeps track of three types of accounts: customer accounts, the employee account, and the manager account. In addition, it allows access to some features from anonymous accounts (users that are not logged in). These main account types allow for contextualization of our dashboards and pages with personalized user data and actions.

All users log in through the common form shown in Figure 2. CLAWS recognizes the logged-in account as a customer, employee, or manager account, and shows the corresponding dashboard (home page). All users also have the logout link at the top right of the page to log out of CLAWS.

3.1 Customer Accounts

Customers can create accounts using the registration form shown in Figure 2. Customers must provide a user name, email, and password. The system will show an error message if the user name is already in use, and will prompt the customer to enter their information again, choosing a different user name.

Upon registration, customer accounts are not valid, and customers cannot log in using them; accounts must be validated by a Purrfur employee before they can be used. Once a customer account has been validated, the customer can log in to CLAWS. The customer dashboard (the page shown immediately after logging in) is shown in Figure 7.

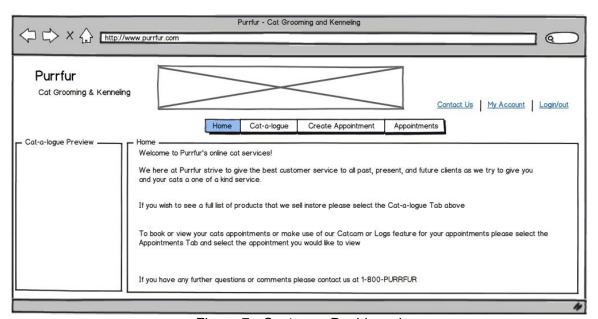


Figure 7 - Customer Dashboard

Logged-in customers are shown a permanent sidebar, with a selection of items from the Cata-logue (see section 2.3). Customers can use the top navigation bar to access their dashboard (the "Home" button), view a full-page Cat-a-logue (the "Cat-a-logue" button; see section 2.1), book a cat appointment (the "Create Appointment" button), or manage their existing

appointments (the "Appointments" button). The "Create Appointment" and "Appointments" pages are detailed in sections 4.1 and 4.2, respectively.

When a customer clicks on the "My Account" link at the top right of the page, an edit account details dialog pops up populated with the user's information in an editable state. They can then save the changes to their fields, including:

- User name
- Email address
- Password

Figure 8 shows the "My Account" dialog.

My Account		
Account Information		
Username	myaccountname	
Email Address	myemailaddress@email.ca	
Password	*****	
Confirm Password	*****	
	Cancel Save	
	Cancel	

Figure 8 - My Account dialog

Finally, customers can reset their lost passwords by using the "Forgot Your Password?" button at the bottom of the login form, shown in Figure 2. Clicking this button prompts the user for their username; once the username is entered and submitted, CLAWS generates a unique password reset URL and emails it to the customer's provided email address. The customer can use this link to reset their password, or simply ignore it if they remember their old password. If the customer chooses to reset their password, they are taken to a plain page with only "Password" and "Confirm Password" fields and a "Change Password" button; upon completion of this page, they are directed to the CLAWS home page to login using their new password. CLAWS will reload the same, simple password reset page if the customer fails to enter matching passwords.

3.2 Employee Account

A single employee account will be created initially. All regular Purrfur employees will share the credentials for the employee account. This employee account will have access to administrative features that the customer doesn't have access to, such as activating customer accounts, adding, editing, and removing Cat-a-logue entries, and more. The employee dashboard, seen after logging as an employee account is shown in Figure 9.

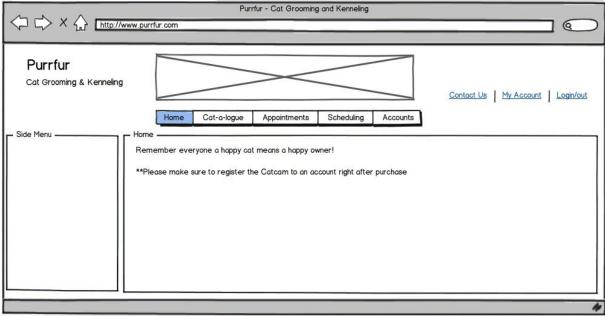


Figure 9 - Employee Dashboard

Employees can access all the same pages as a customer, but they have administrative actions on those pages. For example on the "Appointments" page, the employee can book and modify appointments for users that do not wish to use the online system.

3.3 Manager Account

A single manager account will be created initially. The staff managers at Purrfur will share the credentials for the manager account. The manager account has all the privileges of the employee account, but can also edit the employee schedule.

4.0 Appointments and Scheduling

4.1 Customer Appointment Creation

Appointment and schedule management performed by CLAWS begins with the ability for users to create appointments. As mentioned in section 2.2.3 of the Specification and Management Plan (S1), customers will have the ability to create appointments on-line using the CLAWS "Create Appointment" page. This process begins with the user logging into CLAWS and clicking the "Create Appointment" menu item on the top navigation bar. This will populate the displayed page with a web form containing the following fields (as shown in Figures 10 and 11):

- *Appointment Type
- *Appointment Date range(Kenneling) **or** Appointment Date & Time (Grooming)
- *Cat Name
- Cat Breed
- Special Considerations

*Required Field

In both cases (kenneling and grooming) the user will only be able to select date ranges/dates and times that are at least 48 hours from the current time and available – this will be displayed to them by either a green date/time meaning available or a red date/time denoting unavailable. Availability is determined by referencing the employee schedule and comparing the number of on-duty staff with the number of pre-existing appointments in that time slot. Grooming appointment slots will be listing as unavailable if the number of existing grooming appointments in that slot equals or exceeds one less than the number of staff on-duty at that time. By forcing the user to only select dates and times which are available, the system can guarantee the appointment will be acceptable. After the user has filled out all the required fields correctly (CLAWS will check each field for validity after it is completed), the "Book" button will be clickable.

After clicking the "Book" button, the system will return a confirmation page to the user outlining the booking they are about to make, with a "Cancel" and a "Confirm Booking" button. If the user selects "Cancel", they will be returned to their home page (dashboard). If the user selects "Confirm Booking", the system will commit the booking and its associated information to the master appointments schedule before returning the user to the "Appoinments" page, described in section 4.2. The customer is also emailed the details of their booking as further confirmation of the appointment.

Repeat bookings will be made in the same way. Even if a customer has previously booked an appointment for their cat, they will still have to enter in the cat's name and breed, including any special considerations related to the cat and its appointment.

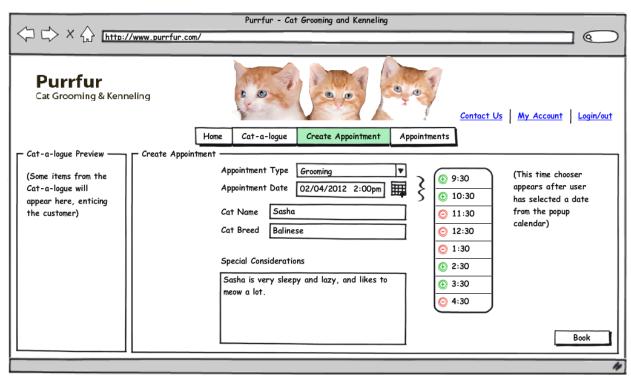


Figure 10 - Customer Appointment Creation, Grooming

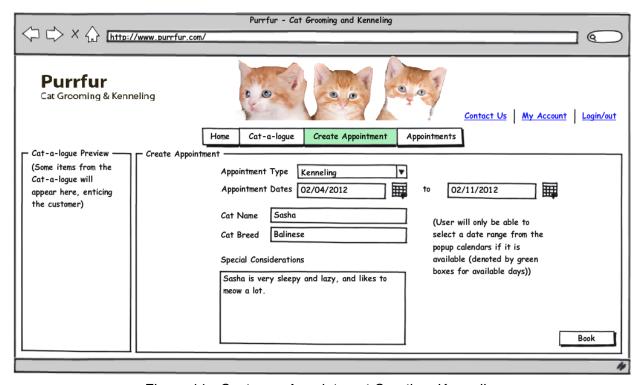


Figure 11 - Customer Appointment Creation, Kenneling

4.2 Customer Appointments

Following creation of an appointment by the customer, the customer can log in to CLAWS and select "Appointments" on the top navigation bar. On the "Appointments" page, there will be a list of all previous, ongoing, and upcoming appointments, with buttons next to each item labeled "Modify", "Delete", "Catcam", and "Log". The "Catcam" button will only be enabled if the user has signed up for the "Catcam" service, but it will always be visible. When pressed, it will take them to the Catcam page described in section 5.2. The "Log" button will take the user to the Log page described in section 5.1.

When the user clicks on "Modify", they will be taken to a similar page as when they made the booking. All the form fields will be populated with the appointment's existing information. The customer will have the ability to change any of the fields mentioned in section 4.1, and click the "Update" button. This will prompt the system to commit their newly requested times and/or other information into the scheduler and will return, similarly to when creating the appointment, a confirmation page and a link back to the "Appointments" page. Customers cannot create or modify a grooming appointment within 48 hours of the appointment start, and cannot change the time of an existing grooming appointment to a time within 48 hours of the current time. The same rules apply for kenneling appointments, except that customers can move the end date of the kenneling appointment, provided that the new end date is at least 48 hours from the current time.

When the user clicks on "Delete", a confirmation dialog will be presented, asking the customer if they really wish to delete the appointment and providing an option to modify it instead. Customers may not delete any appointment(s) that are scheduled to occur within 48 hours; instead, they must contact Purrfur directly.

4.3 Appointment Views and Creation for Employees

Appointments become visible to the employee as soon as they are created. Employees view appointments through the "Appointments" screen which the employee can navigate to using the "Appointments" navigation bar item followed by the "View Appointments" sidebar menu item. Employees can use this page to quickly see what the present and upcoming scheduled appointments are in a calendar-type view (Figure 12).

By default, the page displays the current day and upcoming two days, but the employee can move the calendar left or right to see dates previous or ahead by clicking on the arrow buttons each side of the calendar or by using the date picker to jump to a chosen month and year. Grooming appointments will be displayed as buttons in a given time slot within the day containing the appointment number whereas kenneling appointments will be displayed as a button spanning multiple days across the top of the calendar. The difference between how grooming and kenneling appointments are displayed in the calendar is due to the fact that grooming appointments are one hour in duration and kenneling appointments last multiple days.

By clicking on any appointment button in the calendar, the employee will be presented with the full details pertaining to the appointment in the bottom left hand corner of the screen, including all the fields mentioned in section 4.1. The employee also has the ability to modify any of the

fields within the appointment by changing the fields and clicking the "Update" button (in the method described in section 4.2) or deleting the appointment entirely by clicking on "Cancel". The system will return a confirmation window to the employee informing them that the update or (deletion) was successful. Any modifications (or deletions) an employee makes to an appointment will be summarized and e-mailed to the customer in the form of a notification.

In addition to modifying existing appointments (either created by the customer or otherwise), employees have the ability to create appointments for customers if the customer, for example, arrives at Purrfur in person or phones in. In this case, the employee can select "Appointments" from the menu and then "Create Appointment" from the side menu to be presented with a slightly different "Create Appointment" page as compared to what the customer would see on the same page. That is, in addition to all the fields outlined in Section 4.1, the employee has an additional field for selecting which customer account they are making the appointment for (if it does not exist, the employee can create it). This list will be populated by having the system query the entire list of customer accounts. Aside from that additional field, the create appointment process remains the same, including the confirmation page and any e-mail notifications sent out to the customer. Unlike customers, employees can create, modify, or delete an appointment anytime before or during the event itself.

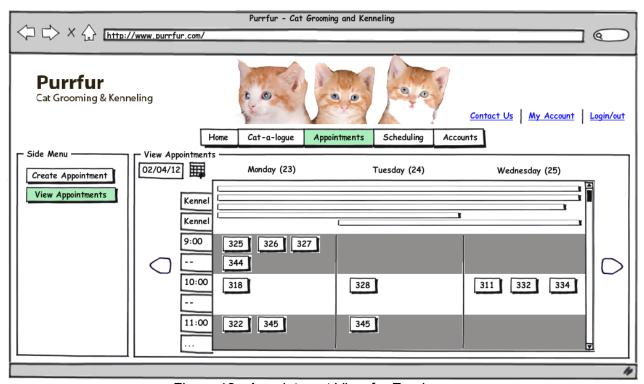


Figure 12 - Appointment View for Employees

4.4 Appointment Views and Creation for Managers

Managers have the same views and permissions as the employees in relation to customer appointments. This means that, from the perspective of a manager account, the "View Appointments" and "Create Appointment" screen will look and behave in the same way as it would with an employee account.

4.5 Employee Scheduling for Employees

Any employee can view the schedule by clicking on the scheduling tab. It will display the schedules in a week at a glance chart as seen in Figure 13. Each employee's shift is labeled with the employee's employee ID, and stretches from the start time to the end time. Employee IDs are unique identifiers associated with employees by managers. If the employee clicks on one of the bars, the shift detail box containing the employee ID, start time, and end time will be filled with the specific information for that shift. The information is for display only and cannot be changed by employees.

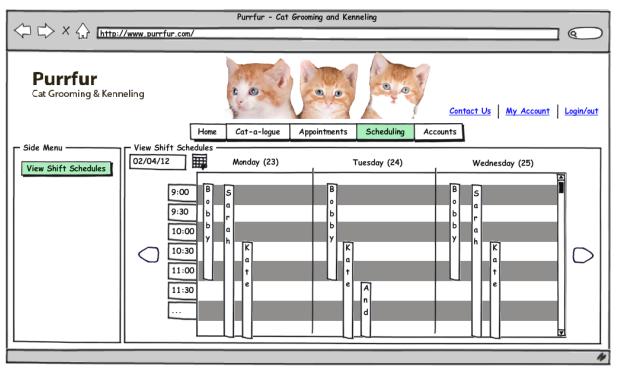


Figure 13 - View Shift Schedules for Employees

4.6 Employee Scheduling for Managers

The view of the schedule for managers looks exactly like the employee view, save for some additional functionality. There will be two buttons added to the schedule blocks: "Modify" and "Cancel". In the lower left hand corner, there will be a create shift button, which brings up the empty fields for the start time, end time, and the employee ID, and a book shift button. If the shift is being created for the first time, the buttons are there, but none will be usable until the information has been written into the shift details. Once the shift details are populated, the "Book Shift" button is enabled. The shift booking process requires the selection of one date on a calendar and a start time and end time on the day schedule.

If the manager clicks "Modify" on an existing shift, the system will re-open the create shift fields and populate them with the current shift information as well as providing an "Update Shift" button. Once a field has been modified, the "Cancel" button will be available. Once the manager has edited a field, the "Update Shift" button will be enabled. If the manager selects another shift after editing a field but before updating, they will be asked to confirm before the fields are repopulated. If the manager clicks the cancel button, they will be asked for confirmation before the shift is cancelled.

The schedule view displays one week at a time and defaults to the current week. Like appointments, shifts are saved indefinitely and the manager can view any week since the system was created.

The manager will also have a "Calculate Hours Worked" button which opens fields for an employee ID, a start date and an end date and provides a "Calculate Hours" button. When all the fields are filled, the manager can click the "Calculate Hours" button to provide the total hours worked by the specified employee between the start and end dates.

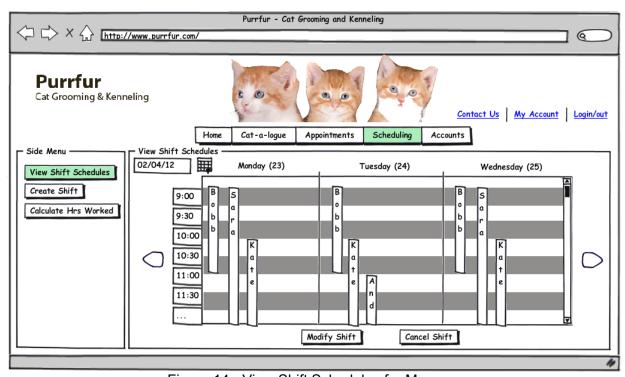


Figure 14 - View Shift Schedules for Managers

5.0 Kenneled Cat Information

5.1 Logs

The logs provide a repository for notes and details pertaining to a cat while being kennelled. The employee overseeing the cat decides if information is pertinent enough to be included or

not. The system doesn't require a specific format for the logs, so the managers/employees can choose a format most suited to the information being stored. The log will be stored on the website for as long as the history of past appointments is kept.

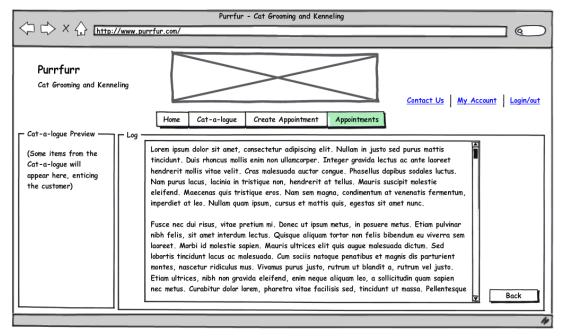


Figure 15 - Log view for a Customer

From a customer point of view the logs will be accessed through the "Appointments" page (see section 4.2). Beside the "Modify" and "Delete" buttons will be a link named "Logs". This will open a basic page with all the main menu options, with the log viewable in the main area, with a scroll bar if necessary. There will be a "Back" button, taking the customer back to the "Appointments" page.

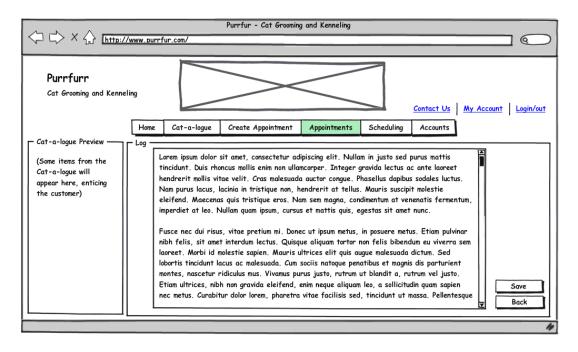


Figure 16 - Log view for an Employee

If an employee wishes to view and potentially edit a log, they are accessible from the "Appointments" page (see section 4.3). When the employee clicks on an appointment button, the full details page will provide a link called "Log", taking the employee to a full page view of the log. This will be displayed in an editable field, with a "Save" button located above the "Back" button. The "Back" button takes the employee back to the "Appointments" page.

5.2 Catcam

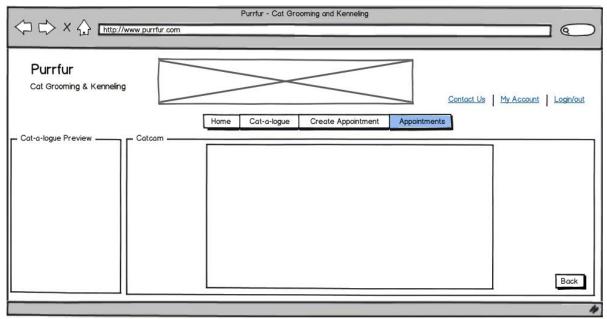


Figure 17 - Catcam View

Catcam is a customer account feature that can be purchased for a premium when checking a cat into Purrfur for kenneling. The Catcam page is composed of a small video window and a "Back" button. The video window will provide a live stream of the cat in the kennel. The "Back" button can be used at anytime by a customer to end their video session and return to the appointments page.

Customers can access the Catcam through the "Appointments" page by clicking the "Catcam" link on a kenneling appointment. If a customer has not purchased the Catcam feature, then the "Catcam" link will be greyed out on the "Appointments" page and the Catcam view will be unreachable by the customer. After purchasing this feature, the button will become available for the customer.

When a customer accesses the Catcam page from their account, they will be redirected to a page that contains a video player that will instantly begin to stream video from the camera in the kennel to their computer. If the cat is not currently in the kennel, then an appropriate screen shot displaying a friendly message will be displayed instead of an empty kennel. Because the camera system is just for basic streaming, the employees will have to trigger the camera

on individual kennels depending on their occupancy. The cameras on the kennels will all be installed with a switch which can be turned on and off physically by the employee. Employees should turn the cameras off if the kennel is not in use, or if they are removing the cat from the kennel for other purposes, so that the system knows to display a message telling the customer that their cat is currently out.

Because Catcam is a purchased feature, employees will have to tell CLAWS if a customer has paid for it. After the customer has paid for the Catcam service, an employee must log into CLAWS and access the customer appointment. After they have selected the customer appointment, they can select the appropriate kennel that the cat will be staying in from a drop-down menu. This drop-down menu will only be available for kenneling appointments as grooming appointments will not have a Catcam option.

After a kennel appointment has ended, CLAWS will automatically set the camera number to none so that the camera is now free for other use and can no longer be accessed by the customer for that appointment.

6.0 Use Cases

6.1 Scheduler Use Cases

6.1.1 Customer Use Case

Suzie has two cats and is going on a week long business trip this Friday. Today is Saturday and Suzie is about to schedule appointments for her two cats, Tom and Mittens. Tom needs grooming and kenneling over the course of the trip. Mittens is already kenneled at Purrfur.

First, Suzie will book Tom's grooming appointment. She starts by logging on to CLAWS.

System: Displays client page including the tabs "Home", "Cat-a-logue", "Create

Appointment", and "Appointments".

Suzie: Clicks the "Create Appointment" tab.

System: Displays the "Create Appointment" page (see Figure 10).

Suzie: Selects "Grooming" from the drop down menu.

System: Displays one calendar.

Suzie: Sees that this Tuesday has an available slot and selects this Tuesday.

System: Displays the available times for this Tuesday.

Suzie: Sees that there is no good time for her on Tuesday and looks back at the

calendar. There are also times available on Wednesday, so Suzie selects

Wednesday.

System: Replaces the Tuesday appointment list with the Wednesday appointment list.

Suzie: Sees a time she likes and selects it.

System: Enables the fields for cat name, breed, and notes.

Suzie: Fills in the information.

System: Waits for name to be filled, then enables "Book" button.

Suzie: Clicks "Book".

System: Displays confirmation request.
Suzie: Clicks "Confirm Booking".

The appointment has been booked. Now Suzie wants to book kenneling for Tom.

Suzie: Clicks "Create Appointment" tab.

System: Displays "Create Appointments" page.

Suzie: Selects "Kenneling".

System: Displays two calendars (start date and end date).

Suzie: Selects a start date.

System: Limits availability on second calendar to dates after the start and before the next

time the kennel is full.

Suzie: Selects available end date.

System: Enables name, breed and notes.

Suzie: Enters information.

System: Enables "Book" button.

Suzie: Clicks "Book".

System: Requests confirmation. **Suzie:** Clicks "Confirm Booking".

The kenneling appointment has been booked. Just then Suzie receives two phone calls. One is from her employer calling her in to work on Wednesday, and the other is from her travel agent telling her she can bring the cats with her on her trip. Suzie decides that she will bring both Tom and Mitten with her on the trip instead of keeping them kenneled at Purrfur. She logs in to CLAWS again to update the appointments. First she needs to move the grooming appointment.

Suzie: Clicks "Appointments".

System: Displays list of appointments for Suzie's cats.

Suzie: Clicks "Modify" on Tom's grooming appointment.

System: Reopens the create appointment tab with the information for the appointment

already in the various fields and a button labeled "Update".

Suzie: Sees that Thursday is also open and selects it.

System: Displays the appointment times available for Thursday.

Suzie: Selects a new time, and clicks "Update".

System: Requests confirmation.
Suzie: Clicks "Confirm Update".

The appointment has been rescheduled. Next, Suzie wants to cancel Tom's kenneling.

Suzie: Clicks "Appointments" tab.

System: Displays the appointments Suzie currently has scheduled.

Suzie: Clicks "Cancel" on Tom's kenneling appointment.

System: Requests confirmation.

Suzie: Clicks "Confirm Cancellation".

The appointment has been cancelled. All that remains is to modify Mittens' kenneling appointment.

Suzie: Selects "Appointments" and clicks "Modify" on Mittens' kenneling appointment. **System:** Reopens the create appointment tab with the information for the appointment

already in the various fields and a button labeled "Update".

Suzie: Selects this Thursday as the new end date, then clicks "Update".

System: Requests confirmation.
Suzie: Clicks "Confirm Update".

The kenneling end date has been changed.

6.1.2 Employee Scheduling Use Case

Ed, a manager at Purrfur, is scheduling employees for next week. He has just two more to schedule, Jack and Jill. Suppose Jill has already been scheduled. Now he schedules Jack.

Ed: Clicks the "Scheduling" tab.

System: Displays the week at a glance view of the employee schedule.

Ed: Fills information for a shift into the shift fields.

System: Waits for information to be filled, then enables the "Book Shift" button.

Ed: Clicks "Book Shift" and confirms.

Jack's shift has been scheduled. However, Jack calls and informs Ed that he has been called to jury duty. Ed must cancel his shift and extend Jill's shift to cover the time.

Ed: Clicks the "Cancel" button on Jack's shift on the week at a glance schedule and

confirms.

Jack's shift has been canceled.

Ed: Clicks the "Modify" button on Jill's shift on the week at a glance schedule.

System: Fills the shift information fields with Jill's details and provides the "Update" button.

Ed: Changes the end time to a later time, clicks "Update", and confirms.

Jill's shift has been extended to cover Jack's absence.

6.2 Cat Information Use Cases

6.2.1 View Log Use Case

Bob, a Purrfur customer, wants to view the log of a cat he has kennelled at Purrfur.

Bob: Logs in to CLAWS and selects "Appointments". **System:** Browser displays a list of Bob's appointments.

Bob: Clicks the "Logs" button on the current kenneling appointment.

System: Displays the "Logs" page with all the log information displayed exactly as it was

entered by the employee.

6.2.2 Update Log Use Case

Kim, a Purrfur employee, needs to add information to the log for Bruiser, a kitten in kennel #4.

Kim: Logs into CLAWS and selects the "Appointments" tab from the navigation bar,

and opens the "View Appointments" page from the sidebar. Selects the kenneling

appointment for Bruiser.

System: Directs browser to "Appointment Details" page.

Kim: Clicks the "View Log" button.

System: Directs browser to "Logs" page, and places the ongoing log in a editable field.

Kim: Adds the information to the log, and clicks "Save".

System: Saves the log. If a customer views the log after this moment, the information

entered by Kim will be visible.

6.2.3 Cat Cam Use Case

Julie wants to view the Catcam for one of her cats kenneled at Purrfur.

Julie: Logs into CLAWS

System: Opens customer home page Selects "Appointments" tab
System: Opens "Appointments" tab

Julie: Clicks current kenneling appointment and selects "Catcam"

System: Directs browser to Catcam page and checks kennel occupancy

if the cat is in: Start streaming video to Julie's computer

Julie: Julie can now see her cat

if the cat is out: Display appropriate message to Julie's computer

Julie: Julie cannot see her cat but knows why

6.2.4 Enabling Catcam for Kenneling Appointment

Bob, a Purrfur employee, has just received payment from a customer for the Catcam service. Now he has to enable it for the customer.

Bob: Logs into CLAWS

System: Opens employee home page
Bob: Selects "Appointments" tab

System: Opens "Appointments" schedule

Bob: Selects kenneling appointment that a customer has bought Catcam for

Bob: Selects the dropdown menu labeled "Catcam" and selects the proper kennel

number from the list

System: Associates Kennel cam with appointment and enables customer link

6.3 Cat-a-logue Use Cases

6.3.1 Add Product Use Case

The manager wants to add a new item in the Cat-a-logue for a new version of "Fancy Feast".

Manager: Accesses the url for CLAWS.

System: Displays login page shown in Figure 2.

Manager: Enters information and clicks ok.

System: Logs the manager in and displays the manager (same look as the employee

dashboard shown in section 3.2)

Manager: Clicks on the "Cat-a-logue" on the navigation bar at the top.

System: Displays the full standalone Cat-a-logue view in the Manager context shown in

section 2.5.

Manager: Clicks "Add Product"

System: Displays the "Product" Dialog shown in section 2.5

Manager: Fills in the required fields for "Name", "Price", "Description", and an image for the

thumbnail, all with information on the new version of "Fancy Feast". Then the

manager clicks the "Ok" button.

System: Adds a new product in and displays it in the Cat-a-logue for all users.

6.3.2 Update Product Use Case

The manager wants to update an existing product of "Cat claw files" price down to 5\$.

Manager: Accesses the url for CLAWS.

System: Displays login page shown in Figure 2.

Manager: Enters information and clicks ok.

System: Logs the manager in and displays the manager (same look as the employee

dashboard shown in section 3.2)

Manager: Clicks on the "Cat-a-logue" button on the navigation bar at the top.

System: Displays the full standalone Cat-a-logue view in the Manager context shown in

section 2.5.

Manager: Hovers mouse over the product for "Cat claw files".

System: Displays action buttons for the current product (i.e. "Cat claw files")

Manager: Clicks on "Edit".

System: Displays the "Edit Product" dialog shown in section 2.5, populated with the

information for the product.

Manager: Edits the price from 10\$ down to 5\$, and clicks "Save".

System: Updates the product in the server and displays the updated amount for all users

in

the Cat-a-logue.

7.0 Modifications

The following section addresses the comments made on deliverable S1 (Functional Specification and Management Plan) by members of Purrfur.

Purrfur (comment 2): The cat puns make the names too confusing. Some better names: "Catalogue" is okay, "Catpture" should be "Catcam," and "Cat-logs" should be "Logs."

Endeavour Studios: The camera service has been renamed to "Catcam", and the cat logs are now simply "logs".

Purrfur (comment 3): Why Windows 7? Is it not a web-based system?

Endeavour Studios: While the choice of operating system for the requested desktop computers does not affect access to CLAWS, we thought it would be best to use Windows 7, as most people are comfortable with it. Also, it is likely that the requested desktop computers will find other uses, and Windows 7 is compatible with a huge variety of other programs.

Purrfur (comment 4): Didn't we mention something about protecting us from spammers by verifying an account with a phone call?

Endeavour Studios: Yes; this was accidentally omitted from S1. Newly created customer accounts will be inactive, but viewable by employees, who have the power to activate or reject them. This process is covered in section

Purrfur (comment 6): Will there be any lost password recovery?

Endeavour Studios: Yes; while this was omitted from S1, customers will be able to reset their passwords. The process for this is covered in section 3.1.

Purrfur (comment 10): Consistency is needed on priorities and core feature.

Endeavour Studios: We have since resolved the confusion. Appointments and scheduling is now designated as the highest priority feature.

Purrfur (comment 15): This is a subscribed service so there should be some way to sign-up for the service (and pay).

Endeavour Studios: An employee must activate the Catcam for a paying customer; this process is covered in section 5.2. Online payment methods, however, have not been previously mentioned as a requirement, and were intentionally avoided.

Purrfur (comment 16): We just need a static web page and a WYSIWYG editor. A database is too complex for our needs. On the other hand, a database-based catalogue might be easier to implement and update than a WYSIWYG editor.

Purrfur (comment 19): The catalogue is a static web page, which we want to be able to update ourselves. The inventory shouldn't be in a database; that's too complex.

Endeavour Studios: While a database introduces some complexity, we are of the opinion that it is the safest and most scalable way to store the Cat-a-logue items. The database will only run behind the scenes, however; employees and managers will be able to edit the Cat-a-logue as described in section 2.5.

Purrfur (comment 20): What are the "notepads" mentioned with regards to the logs? **Endeavour Studios:** They are simple, plaintext documents (unformatted text).

Purrfur (comment 30): The "Cat"-a-logue is part of the public site. You do not need an account to see this.

Endeavour Studios: Agreed. This was an oversight in section 4.0 of S1; the remainder of the document supported the idea of the Cat-a-logue as publicly accessible.