## **Front End Unit Testing**

Unit/Component	Requirements	Test Procedure	Bugs/Incompletions
Navigation Bar	Navigation Bar should successfully link all of the pages efficiently without error	1.Load Home Page	
		2.Click through all navigation bar components	
		3. Ensure user can navigate back and forth though every page with ease	
Animal Page	- When the page first loads the user should see an organized display	1. Load Animal Page	
	of all of the animals in the shelter database	Test all sorting features	
	- The user should be able to filter/sort through results through multiple attributes (includes: species, breed, weight, age, color, gender, and location)	3. Ensure user can successfully filter through results to find the animals that match their preferences	
	- The page will then update results to user preference		
Selecting an Animal from the Animal Page	- After loading/sorting through the animal list the user will have the	1. Load Animal Page	
	option to see more about the animal	2. Select an animal	
	- The page will return a description (if available) of the selected animal while also giving the option to fill out an application form	3. Ensure the animal description displays correctly while giving the option to fill out an application	

Filling Out/Printing Application	- After selecting to fill out an animal application the application form will display for the user with the animal ID already filled  - The user will be able to enter their information and submit an application] or download the pdf to fill the application out by hand  - After the application is filled out, they receive a confirmation.  - The application is then sent to an admin for further review	1. Select an animal and then select the application form  2. Ensure the application displays correctly  3. Fill out form with credentials and submit form  4. Ensure the page displays a confirmation and that the application is successfully sent to the admin's email	
Donating	- After selecting the donation tab in the navigation bar, the user will be linked to a donation page  - The donation page will include a link to the SPCA donation page where they can contribute to all of the state's shelters	Select the donation link     Ensure the link directs the user to the SPCA website	

## **Back End Unit Testing**

Unit/Component	Requirements	Test Procedure	Bugs/Incompletions
Admin Account Creation	- After selecting "Registration", user will be linked to CRUD application that will allow admin to register using an authorization code  - After successful validation, the user will be shown confirmation page and the credentials will be stored in the admin collection  - If credentials are invalid, the document will not be stored in the database	1. Select "Registration" under "Admin" tab  2. Ensure the page directs the user to the admin registration form  3. Fill out application with incorrect input (testing all user validation)  4. After testing every incorrect input, enter correct input  5. Ensure confirmation page is displayed and the user credentials are stored in the database	
Admin Account Login	- After selecting "Registration", user will be linked to a login form that accepts Employee Number and Password  - The user will successfully be directed / have access to the Pet database if credentials are correct  - If incorrect credentials are entered, the user will	1. Select "Login" under "Admin" tab  2. Ensure page displays login form  3. Enter incorrect information to test user validation  4. Afterwards, enter correct login credentials and ensure that admin is directed to the Pet database	

	be unable to access backend functionality		
Pet Creation	- After successful login, the admin will be able to remove, modify, or register a pet  - User selects to register a new pet and the pet registration application is displayed  - The user must fill out all of the required inputs or the pet will not be stored in the database	1. Select to Add a Pet  2. Attempt to enter incorrect/incomplete inputs for required fields  3. After testing all input validation, enter correct information and ensure that the database is updated	
Pet Deletion	- After successful login, the admin will be able to remove, modify, or register a pet  - User selects to remove a pet and a deletion confirmation is displayed to the user  - Pet is removed from the database and pet listing is updated	1. Select to remove a pet  2. Ensure a confirmation of deletion is prompted to the user  3. Select NO to test that the pet is not removed without proper confirmation  4. Next select YES and check database to ensure pet is removed successfully	
Pet Modification	- After successful login, the admin will be able to remove, modify, or register a pet  - User selects to modify a pet  -The Pet Registration	1. Select to modify a Pet  2. Ensure Pet Registration is displayed  3. (See 'Pet Creation' Procedure)	

application is redisplayed  - The user must fill out all of the required inputs or the pet will not be stored in the database	4. Check database to ensure that the data is updated successfully
---	---

## **Integration Testing (End to End)**

Action	Unit Test (see table above)	Bugs/Incompletions
User accessing site just to navigate and look through the features/listings	- Navigation Bar	
User is looking for the perfect pet and to fill out a pet application	<ul><li>Navigation Bar</li><li>Animal Page</li><li>Selecting an Animal from the Animal Page</li><li>Filling Out an Application</li></ul>	
User accessing site to donate to the SPCA or view SPCA social media	- Navigation Bar - Donating	
Admin is looking to register an account	- Navigation Bar - Admin Account Creation	
Admin is looking to access the pet database to add, modify, or delete an animal	<ul><li>- Navigation Bar</li><li>- Admin Account Login</li><li>- Pet Creation</li><li>- Pet Deletion</li><li>- Pet Modification</li></ul>	