To fulfill your request for the **PetCake Delight** project, I’ll provide detailed task breakdowns and hourly estimates for each of the **25 Must Have** and **5 Should Have** user stories listed in your provided user stories. These breakdowns will be formatted as required for inclusion in the **Functionality** section of your Requirements Document, specifying the tasks needed to implement each user story, including coding, styling, responsiveness, and testing. I’ll leverage **WordPress/WooCommerce** as the CMS, as implied by your project context, and note where existing functionality can be used while ensuring customizations highlight your development skills (e.g., custom themes, plugins). I’ll exclude the **Nice to Have** user stories from the task breakdowns, as they are optional, and avoid referencing deleted content (e.g., ingredient details, screen reader accessibility, contact form, newsletter, pet type filtering, customization review, order summary). The artifact will be structured for easy integration into your Requirements Document.

**Notes on Approach**

* **WordPress/WooCommerce**: I’ll assume you’re using WordPress with WooCommerce for e-commerce functionality, as it supports most user stories (e.g., product browsing, cart, checkout). Tasks will include configuring WooCommerce, customizing templates, and ensuring responsiveness.
* **Customizations**: To showcase your skills, I’ll include tasks for creating a custom child theme and custom plugins where necessary (e.g., for cake customization).
* **Responsiveness**: Included in all Shopper-facing stories, aligning with Must Have #16 and #26.
* **Accessibility**: While you removed the screen reader story, I’ll include basic accessibility tasks (e.g., semantic HTML, alt tags) to meet minimum standards, as suggested in the requirements.
* **Task Breakdowns**: Each user story will have a list of tasks with hourly estimates, covering development, styling, integration, responsiveness, and testing. Tasks will reflect CRUD operations (Create, Read, Update, Delete) where applicable.
* **Estimates**: Conservative estimates to account for customization and testing, assuming intermediate developer skills.
* **Exclusions**: No tasks for deleted stories or Nice to Have stories.

**Revised User Stories with Task Breakdowns**

PetCake Delight User Stories with Task Breakdowns

## Must Have User Stories (26)

These focus on the MVP: browsing by category, customizing, ordering (offline payment), and store management, with responsiveness.

### Shopper Flow

#### 1. As a Shopper, I want to browse Cake products by category (e.g., dog cakes, cat cakes, seasonal) so that I can easily find what I am looking for.

**Tasks and Time Estimates**:

* + Configure WooCommerce product categories: 1 hour
  + Create product listing page template (child theme, PHP/HTML): 2 hours
  + Style product grid (CSS): 2 hours
  + Add category navigation menu (PHP/CSS): 1.5 hours
  + Ensure responsive layout (CSS media queries): 1.5 hours
  + Add basic accessibility (semantic HTML, alt tags for images): 1 hour
  + Test across browsers and devices: 1 hour
  + **Total**: 10 hours

#### 2. As a Shopper, I want to view detailed information about a Cake (e.g., description, price, ingredients) so that I can make an informed purchasing decision.

* **Tasks and Time Estimates**:
  + Customize WooCommerce single product page template (PHP/HTML): 2 hours
  + Style product details (description, price) (CSS): 1.5 hours
  + Ensure responsive layout: 1 hour
  + Add basic accessibility (semantic HTML): 0.5 hours
  + Test display across devices: 1 hour
  + **Total**: 6 hours

#### 3. As a Shopper, I want to see a high-quality image of a Cake so that I can visualize the product.

* **Tasks and Time Estimates**:
  + Configure WooCommerce product image settings: 0.5 hours
  + Customize product image display in single product template (PHP/HTML): 1 hour
  + Style image for responsiveness (CSS): 1 hour
  + Add alt tags for accessibility: 0.5 hours
  + Test image display across devices: 1 hour
  + **Total**: 4 hours

#### 4. As a Shopper, I want to customize a Cake order (size, flavor, shape, icing, message, pet name) so that I can create a personalized product for my pet.

* **Tasks and Time Estimates**:
  + Create custom plugin for cake customization form (PHP): 4 hours
  + Design customization form (HTML/CSS): 2 hours
  + Add form fields (size, flavor, shape, icing, message, pet name) (PHP): 1.5 hours
  + Implement form validation (JavaScript/PHP): 2 hours
  + Integrate form with WooCommerce cart (PHP): 3 hours
  + Style form for responsiveness (CSS): 1.5 hours
  + Add basic accessibility (ARIA labels, keyboard navigation): 1 hour
  + Test form across devices: 2 hours
  + Database functions (store customization data): 3 hours
  + **Total**: 20 hours

#### 5. As a Shopper, I want to add a Cake to my shopping cart so that I can purchase it.

* **Tasks and Time Estimates**:
  + Configure WooCommerce add-to-cart functionality: 0.5 hours
  + Customize add-to-cart button on product page (PHP/HTML): 1 hour
  + Style button (CSS): 0.5 hours
  + Ensure responsive layout: 0.5 hours
  + Add basic accessibility (ARIA labels): 0.5 hours
  + Test add-to-cart across devices: 1 hour
  + **Total**: 4 hours

#### 6. As a Shopper, I want to see a confirmation message after adding a Cake to my cart so that I know the action was successful.

* **Tasks and Time Estimates**:
  + Implement cart add confirmation message (JavaScript/PHP): 1 hour
  + Style confirmation message (CSS): 1 hour
  + Ensure responsive layout: 0.5 hours
  + Add basic accessibility (ARIA live region): 0.5 hours
  + Test message display across devices: 1 hour
  + **Total**: 4 hours

#### 7. As a Shopper, I want to view the contents of my shopping cart so that I can see what I am buying.

* **Tasks and Time Estimates**:
  + Customize WooCommerce cart page template (PHP/HTML): 2 hours
  + Style cart contents (CSS): 1.5 hours
  + Ensure responsive layout: 1 hour
  + Add basic accessibility (semantic HTML): 0.5 hours
  + Test cart display across devices: 1 hour
  + **Total**: 6 hours

#### 8. As a Shopper, I want to update the quantity of Cakes in my cart so that I can adjust my purchase.

* **Tasks and Time Estimates**:
  + Configure WooCommerce quantity update functionality: 0.5 hours
  + Customize quantity input fields (PHP/HTML): 1 hour
  + Style inputs (CSS): 0.5 hours
  + Implement validation (JavaScript): 1 hour
  + Ensure responsive layout: 0.5 hours
  + Test updates across devices: 1 hour
  + **Total**: 4.5 hours

#### 9. As a Shopper, I want to remove Cakes from my cart if I change my mind.

* **Tasks and Time Estimates**:
  + Configure WooCommerce remove item functionality: 0.5 hours
  + Customize remove button (PHP/HTML): 1 hour
  + Style button (CSS): 0.5 hours
  + Ensure responsive layout: 0.5 hours
  + Test removal across devices: 1 hour
  + **Total**: 3.5 hours

#### 10. As a Shopper, I want to proceed to checkout so that I can submit my order.

* **Tasks and Time Estimates**:
  + Configure WooCommerce checkout page: 1 hour
  + Customize checkout button on cart page (PHP/HTML): 1 hour
  + Style button (CSS): 0.5 hours
  + Ensure responsive layout: 0.5 hours
  + Test checkout flow across devices: 1 hour
  + **Total**: 4 hours

#### 11. As a Shopper, I want to enter my contact and shipping information so that my order can be processed.

* **Tasks and Time Estimates**:
  + Configure WooCommerce checkout fields (contact, shipping): 1 hour
  + Customize checkout form (PHP/HTML): 2 hours
  + Style form (CSS): 1.5 hours
  + Implement validation (JavaScript/PHP): 1.5 hours
  + Ensure responsive layout: 1 hour
  + Test form across devices: 1.5 hours
  + **Total**: 8.5 hours

#### 12. As a Shopper, I want to choose a pickup or delivery option so that I can receive my order conveniently.

* **Tasks and Time Estimates**:
  + Create custom shipping method for pickup/delivery (PHP): 2 hours
  + Add pickup/delivery option to checkout (PHP/HTML): 1.5 hours
  + Style options (CSS): 1 hour
  + Ensure responsive layout: 0.5 hours
  + Test selection across devices: 1 hour
  + **Total**: 6 hours

#### 13. As a Shopper, I want to see the estimated delivery or pickup date during checkout so that I can plan for my order.

* **Tasks and Time Estimates**:
  + Add estimated date display to checkout page (PHP/HTML): 1 hour
  + Style date display (CSS): 0.5 hours
  + Calculate dates based on Manager settings (PHP): 1.5 hours
  + Ensure responsive layout: 0.5 hours
  + Test display across devices: 1 hour
  + **Total**: 4.5 hours

#### 14. As a Shopper, I want to see a confirmation page after submitting my order so that I know it was successful.

* **Tasks and Time Estimates**:
  + Customize WooCommerce order confirmation page (PHP/HTML): 1.5 hours
  + Style confirmation page (CSS): 1 hour
  + Ensure responsive layout: 0.5 hours
  + Test page across devices: 1 hour
  + **Total**: 4 hours

#### 15. As a Shopper, I want to receive an order confirmation email so that I know my order has been placed successfully.

* **Tasks and Time Estimates**:
  + Configure WooCommerce email settings: 1 hour
  + Customize confirmation email template (PHP/HTML): 1.5 hours
  + Style email (CSS): 1 hour
  + Test email delivery and display: 1.5 hours
  + **Total**: 5 hours

#### 16. As a Shopper, I want to view an About page so that I can learn about the shop’s pet-safe ingredients and values.

* **Tasks and Time Estimates**:
  + Create About page template (PHP/HTML): 1.5 hours
  + Style page content (CSS): 1.5 hours
  + Add content (text, images): 1 hour
  + Ensure responsive layout: 1 hour
  + Add basic accessibility (semantic HTML): 0.5 hours
  + Test page across devices: 1 hour
  + **Total**: 6.5 hours

#### 17. As a Shopper, I want to use the website on my mobile device so that I can shop on the go.

* **Tasks and Time Estimates**:
  + Apply responsive design to all Shopper-facing pages (CSS media queries): 3 hours
  + Test mobile functionality (browsing, cart, checkout): 2 hours
  + Optimize images for mobile (PHP/CSS): 1 hour
  + **Total**: 6 hours
* **Note**: This story overlaps with #26 but focuses on Shopper experience, so tasks are distributed.

### Manager Flow

#### 18. As a Manager, I want to add new Cake products to the store so that Shoppers can purchase them.

* **Tasks and Time Estimates**:
  + Configure WooCommerce product creation: 1 hour
  + Customize product admin form (PHP): 1.5 hours
  + Style admin interface (CSS): 1 hour
  + Test add functionality: 1.5 hours
  + **Total**: 5 hours

#### 19. As a Manager, I want to update Cake product details (description, price, images) so that the information is accurate.

* **Tasks and Time Estimates**:
  + Configure WooCommerce product editing: 1 hour
  + Customize edit form (PHP): 1.5 hours
  + Style admin interface (CSS): 1 hour
  + Test edit functionality: 1.5 hours
  + **Total**: 5 hours

#### 20. As a Manager, I want to manage Cake product stock levels so that I can ensure products are available for purchase.

* **Tasks and Time Estimates**:
  + Configure WooCommerce stock management: 1 hour
  + Customize stock input fields (PHP): 1 hour
  + Style admin interface (CSS): 0.5 hours
  + Test stock updates: 1 hour
  + **Total**: 3.5 hours

#### 21. As a Manager, I want to view all Orders so that I can manage and fulfill them.

* **Tasks and Time Estimates**:
  + Configure WooCommerce order dashboard: 1 hour
  + Customize order list view (PHP): 1.5 hours
  + Style dashboard (CSS): 1 hour
  + Test order display: 1 hour
  + **Total**: 4.5 hours

#### 22. As a Manager, I want to update the status of Orders so that Shoppers are informed about their progress.

* **Tasks and Time Estimates**:
  + Configure WooCommerce order status updates: 1 hour
  + Customize status update interface (PHP): 1.5 hours
  + Style interface (CSS): 0.5 hours
  + Test status updates: 1 hour
  + **Total**: 4 hours

#### 23. As a Manager, I want to receive notifications of new Orders so that I can process them promptly.

**Tasks and Time Estimates**:

* + Configure WooCommerce order notification emails: 1 hour
  + Customize notification template (PHP/HTML): 1 hour
  + Style email (CSS): 0.5 hours
  + Test notifications: 1 hour
  + **Total**: 3.5 hours

#### 24. As a Manager, I want to configure pickup and delivery options so that Shoppers can choose their preferred method.

* **Tasks and Time Estimates**:
  + Create custom shipping method for pickup/delivery (PHP): 2 hours
  + Customize shipping settings in WooCommerce (PHP): 1.5 hours
  + Style admin interface (CSS): 0.5 hours
  + Test configuration: 1 hour
  + **Total**: 5 hours

#### 25. As a Manager, I want to manage the content on the Homepage and About page so that I can keep the site updated and engaging.

* **Tasks and Time Estimates**:
  + Create custom homepage template (PHP/HTML): 2 hours
  + Customize About page template (PHP/HTML): 1.5 hours
  + Style pages (CSS): 2 hours
  + Add content editor in WordPress admin (PHP): 1.5 hours
  + Ensure responsive layout: 1 hour
  + Test content updates: 1.5 hours
  + **Total**: 9.5 hours

#### 26. As a Manager, I want the website to be mobile-responsive so that it provides a good user experience on all devices.

* **Tasks and Time Estimates**:
  + Apply responsive design to admin interfaces (CSS media queries): 2 hours
  + Test admin functionality on mobile devices: 1.5 hours
  + Optimize admin layouts (CSS): 1 hour
  + **Total**: 4.5 hours
* **Note**: This story complements #17, focusing on Manager interfaces.

## Should Have User Stories (5)

These enhance the experience, aligning with the project plan’s Should Have features.

#### 1. As a Shopper, I want to create an account so that I can save my information for future purchases.

* **Source**: E-commerce example (Create operation)
* **Tasks and Time Estimates**:
  + Configure WordPress/WooCommerce user registration: 1 hour
  + Customize registration form (PHP/HTML): 1.5 hours
  + Style form (CSS): 1 hour
  + Implement validation (JavaScript/PHP): 1.5 hours
  + Ensure responsive layout: 0.5 hours
  + Test registration across devices: 1 hour
  + **Total**: 6.5 hours

#### 2. As a Shopper, I want to log in to my account so that I can view my order history and manage my profile.

* **Tasks and Time Estimates**:
  + Configure WordPress/WooCommerce login: 1 hour
  + Customize login form (PHP/HTML): 1.5 hours
  + Style form (CSS): 1 hour
  + Implement validation (JavaScript/PHP): 1 hour
  + Ensure responsive layout: 0.5 hours
  + Test login across devices: 1 hour
  + **Total**: 6 hours

#### 3. As a Shopper, I want to view my order history so that I can see my previous purchases.

* **Tasks and Time Estimates**:
  + Configure WooCommerce order history page: 1 hour
  + Customize order history template (PHP/HTML): 1.5 hours
  + Style history page (CSS): 1 hour
  + Ensure responsive layout: 0.5 hours
  + Test display across devices: 1 hour
  + **Total**: 5 hours

#### 4. As a Shopper, I want to track the status of my order so that I can know when it will arrive.

* **Tasks and Time Estimates**:
  + Configure WooCommerce order tracking: 1 hour
  + Customize tracking page/template (PHP/HTML): 1.5 hours
  + Style tracking display (CSS): 1 hour
  + Ensure responsive layout: 0.5 hours
  + Test tracking across devices: 1 hour
  + **Total**: 5 hours

#### 5. As a Manager, I want to view and manage customer accounts so that I can provide support and handle issues.

* **Tasks and Time Estimates**:
  + Configure WordPress user management dashboard: 1 hour
  + Customize user management interface (PHP): 1.5 hours
  + Style interface (CSS): 1 hour
  + Implement update functionality (PHP): 1.5 hours
  + Test management features: 1.5 hours
  + **Total**: 6.5 hours

**Total Hourly Estimates**

* **Must Have User Stories**:
  + Total: **148 hours**
  + Breakdown:
    - Shopper Flow (17 stories): 102.5 hours
    - Manager Flow (8 stories): 45.5 hours
* **Should Have User Stories**:
  + Total: **29 hours**
* **Grand Total**: **177 hours**

**Note**: These estimates assume intermediate developer skills and include time for customization, responsiveness, and testing. Using WooCommerce reduces development time for standard e-commerce features, but customizations (e.g., cake customization plugin, responsive design) add complexity.

**Integration into Requirements Document**

The artifact above can be directly incorporated into the **Functionality** section of your Requirements Document, specifically under **3. Functionality**:

* **3.a. Must Have User Stories**: Include the 25 Must Have stories with task breakdowns and hourly estimates (148 hours).
* **3.b. Should Have User Stories**: Include the 5 Should Have stories with task breakdowns and hourly estimates (29 hours).
* **3.c. Nice to Have User Stories**: List the 3 Nice to Have stories without task breakdowns, as they are optional.
* **3.d. Hourly Estimates**: Summarize totals (Must Have: 148 hours, Should Have: 29 hours, Total: 177 hours).

**Additional Sections to Complete**:

* **Content Evaluation**:
  + **Navigation**: Define menu structure (e.g., Home, Shop, About, Cart, Checkout).
  + **Layout**: Create wireframes for key pages (e.g., product listing, customization form, checkout).
  + **Content Descriptions and Sources**: Specify text (e.g., About page content), images (e.g., high-quality cake photos), and sources (e.g., self-created or licensed).
* **Technical Specifications**:
  + **Technology Stack**: WordPress, WooCommerce, PHP, HTML, CSS, JavaScript.
  + **Hosting Information**: Specify hosting provider (e.g., SiteGround, WP Engine).
  + **Third-Party Software**: List plugins (e.g., WooCommerce, custom plugin for customization) with versions.
* **Development Specifications**:
  + **Folder Structure**: Define child theme and plugin folders.
  + **File-Naming Conventions**: Use hyphens (e.g., custom-cake-plugin.php).
  + **Accessibility Standards**: Basic WCAG compliance (semantic HTML, alt tags).
  + **Responsiveness Requirements**: Support mobile and tablet devices.
  + **GitHub Links**: Provide repository link.
* **Schedule**: Create a timeline based on 177 hours (e.g., 6–8 weeks at 20–30 hours/week).
* **Introduction and Rationale**: Explain the project’s purpose (e.g., pet-safe cake e-commerce), goals, and target audience.
* **Conclusion**: Summarize the project scope and expected outcomes.

**Recommendations and Next Steps**

1. **Incorporate Artifact**:
   * Copy the artifact content into your Requirements Document’s **Functionality** section.
   * Format tasks in tables for clarity (e.g., columns: Task, Time).
2. **Validate Scope**:
   * Review the 177-hour estimate with your faculty supervisor to ensure it’s feasible.
   * Consider prioritizing Must Have stories if time is constrained.
3. **Complete Content Evaluation**:
   * Draft content for the About page and Homepage.
   * Source or create high-quality cake images.
   * Develop wireframes for key pages.
4. **Address WordPress Customizations**:
   * Create a custom child theme to showcase your skills.
   * Develop a custom plugin for cake customization (#4).
   * Test WooCommerce configurations thoroughly.
5. **Ensure Responsiveness**:
   * Implement CSS media queries for all Shopper-facing pages (#16, #17).
   * Test on mobile devices to confirm usability.
6. **Polish and Submit**:
   * Complete the remaining sections of the Requirements Document.
   * Review for consistency (e.g., “Shopper,” “Manager”).
   * Submit draft to faculty for feedback.