

Home Task Tracker - Web Application Specification

Project Overview

Application Name: Home Task Tracker Version: 1.0.0 Platform: Web-based application (Mobile & Desktop responsive) Development Environment: Replit Target Audience: Household administrators and workers Primary Purpose: Track completion and payment of home-working tasks

Application Description

Home Task Tracker is a comprehensive web application designed to manage and monitor the completion of household tasks such as ironing, dusting, cleaning windows, and other domestic activities. The system enables administrators to create tasks with monetary values, workers to log task completion, and provides a quality approval workflow with automated payment calculations based on approved work.

User Types and Authentication

User Roles (2 types)

Admin Users

- Can create, edit, and delete their own tasks
- Set monetary values for tasks
- Approve or reject completed work from their assigned workers
- View payment reports and analytics for their workers only
- Reset task completion status for their workers
- Manage their own worker accounts
- Each admin operates independently with their own worker group

Worker Users

- Must be assigned to a specific admin during registration/setup
- View tasks created by their assigned admin only
- Mark tasks as completed with dates for their admin
- View their own completion history
- Cannot access admin functions or see other workers' data

Authentication System

- Login Method: Email address and password
- Password Security: Hashed

Core Features

1. Authentication System

- Secure login page with email/password
- Role-based access control with admin/worker isolation
- Session management with automatic logout
- Password requirements and validation
- Worker registration requires admin assignment
- Admin registration creates independent admin groups

2. Admin Task Management

- Create new tasks with descriptions and values for their worker group
- Edit existing task details and monetary values for their own tasks
- Delete or deactivate their own tasks only
- Set task categories and priorities
- View only workers assigned to them
- Bulk task operations for their own tasks

3. Worker Task Interface

- View tasks created by their assigned admin only
- Mark tasks as completed with date selection for their admin
- Past, present, and future date support
- View their own task completion history only
- Mobile-optimized interface for easy use
- Cannot see tasks or data from other admin/worker groups

4. Quality Approval System

- Admin review of completed tasks from their workers only
- Approve or reject with optional notes
- Quality status tracking per admin group
- Email notifications for status changes within groups
- Batch approval capabilities for assigned workers
- Data isolation between different admin groups

5. Reporting and Analytics

- Weekly payment reports for assigned workers only
- Historical data analysis per admin group
- Task completion statistics for their workers
- Worker performance metrics within their group
- Export capabilities (CSV/PDF) for their data only
- Complete data isolation between admin groups

6. Task Reset Functionality

- Weekly reset of task completion status for assigned workers only
- Preserve historical approved data within admin group
- Automated or manual reset options per admin
- Confirmation dialogs for safety
- No cross-contamination between admin groups

Application Workflow

1. User Authentication Flow

1. User visits application
2. Redirected to login page if not authenticated
3. Enter email and password
4. System validates credentials
5. Redirect to appropriate dashboard (Admin/Worker)

2. Admin Task Creation Flow

1. Admin logs in and accesses task management
2. Clicks "Add New Task" button
3. Fills form with task name, description, and value
4. Task saved to database
5. Task appears in worker interface

3. Worker Task Completion Flow

1. Worker logs in and views available tasks
2. Selects task and marks as completed
3. Chooses completion date (past/present/future)
4. Submits completion record
5. Task appears in admin approval queue

4. Admin Approval Flow

1. Admin views pending approvals
2. Reviews completed task details
3. Approves or rejects with optional notes
4. Status updated in database
5. Worker notified of decision

5. Payment Report Generation

1. Admin selects date range (default: current week)
2. System calculates approved task values
3. Generates detailed report with totals
4. Option to export or print report

User Interface Specifications

1. Design Principles

- Mobile-First: Optimized for smartphone use
- Clean Interface: Minimal clutter, clear actions
- Intuitive Navigation: Role-based menu structure
- Responsive Design: Works on all screen sizes
- Accessibility: WCAG 2.1 AA compliant
- Professional Appearance: High-quality images and consistent visual design

2. Visual Design Elements

- Professional Images: Replit will automatically select appropriate high-quality images
- Consistent Branding: Logo and color scheme will be applied across all pages
- Icon System: Font Awesome icons for navigation and actions
- Hero Images: Replit will choose engaging visuals for key pages (login, dashboards)
- Task Illustrations: Replit will select visual representations of household tasks
- Workflow Graphics: Replit will add process diagrams for approval and completion flows
- Mobile-Optimized Images: All selected images will be responsive and scale appropriately

3. Color Scheme

Primary:

#007bff (Blue)

Success:

#28a745 (Green)

Warning:

#ffc107 (Yellow)

Danger:

#dc3545 (Red)

Background:

#f8f9fa (Light Gray)

Text:

#343a40 (Dark Gray)

4. Typography

Font Family: -apple-system, BlinkMacSystemFont, "Segoe UI", Roboto, "Helvetica Neue", Arial, "Noto Sans", sans-serif, "Apple Color Emoji", "Segoe UI Emoji", "Segoe UI Symbol", "Noto Color Emoji"

Base Size: 16px

Headers: 1.25rem - 2.5rem

Mobile Optimization: Larger touch targets (44px minimum)

Cross-Platform Support: Optimized for macOS, Windows, and Android devices

5. Responsive Breakpoints

Mobile: 320px - 576px

Tablet: 577px - 992px

Desktop: 993px and above

Security Considerations

Data Protection

Password hashing

CSRF protection on all forms

SQL injection prevention (parameterized queries)

XSS protection through template escaping

Secure session configuration

Access Control

Role-based access control

Route protection decorators

Session timeout configuration

Input validation on all forms

Admin-only access to sensitive operations

Page-Specific Image Requirements

1. Login Page

Hero Image: Professional home cleaning/organization scene

Purpose: Create welcoming, trustworthy first impression
Style: Clean, modern photography with warm lighting
Size: Optimized for mobile and desktop viewing

2. Admin Dashboard

Management Illustration: Vector graphic showing task organization
Purpose: Convey control and oversight capabilities
Style: Modern SVG illustrations with consistent color scheme
Elements: Charts, checklists, approval workflows

3. Worker Dashboard

Task Completion Graphics: Friendly illustrations of household activities
Purpose: Make task completion feel rewarding and achievable
Style: Approachable vector graphics with positive imagery
Elements: Cleaning supplies, completed tasks, progress indicators

4. Task Management Page

Creation Workflow: Step-by-step visual guide for task setup
Purpose: Make task creation intuitive and professional
Style: Clean infographics with clear process flow
Elements: Forms, monetary values, task categories

5. Approval Interface

Quality Control Graphics: Professional approval workflow visuals
Purpose: Emphasize quality standards and fair assessment
Style: Business-appropriate illustrations showing review process
Elements: Checkmarks, quality badges, feedback mechanisms

6. Reports Page

Analytics Visuals: Charts and graphs for payment tracking
Purpose: Present financial data in clear, professional format
Style: Dashboard-style graphics with data visualization
Elements: Bar charts, trend lines, currency symbols (£)

Success Criteria

The application will be considered successful when:

Users can securely log in with role-based access
Admins can create and manage tasks with monetary values
Workers can complete tasks with flexible date entry
Quality approval workflow functions correctly
Payment reports calculate accurately
Mobile interface provides excellent user experience
Historical data is preserved during resets
All security requirements are met

This specification provides a complete foundation for developing a home task tracking application that meets all your requirements while being optimized for Replit development and mobile usage.