

# Testing Guide - Make-It-All

## Comprehensive Test Data & Setup

### Database Setup

Before testing, run these SQL statements to add the `like_count` column and `kb_post_likes` table:

```
-- Add like_count column to kb_posts
ALTER TABLE kb_posts ADD COLUMN like_count INT DEFAULT 0 AFTER view_count;

-- Create the kb_post_likes table
CREATE TABLE IF NOT EXISTS kb_post_likes (
    like_id INT AUTO_INCREMENT PRIMARY KEY,
    post_id INT NOT NULL,
    user_id INT NOT NULL,
    created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP,
    UNIQUE KEY unique_post_user_like (post_id, user_id),
    FOREIGN KEY (post_id) REFERENCES kb_posts(post_id) ON DELETE CASCADE,
    FOREIGN KEY (user_id) REFERENCES users(user_id) ON DELETE CASCADE,
    INDEX idx_post (post_id),
    INDEX idx_user (user_id)
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4 COLLATE=utf8mb4_unicode_ci;
```

### Test Accounts

All passwords are: **Password123!**

#	Name	Email	Role	Purpose
1	Alice Johnson	alice.manager@make-it-all.co.uk	Manager	Full admin access, can manage projects/employees
2	Bob Smith	bob.lead@make-it-all.co.uk	Team Leader	Team leader on Website Redesign project
3	Carol Williams	carol.dev@make-it-all.co.uk	Team Member	Regular member on Website Redesign
4	Dave Brown	dave.dev@make-it-all.co.uk	Team Member	Not registered (test registration)
5	Emma Davis	emma.specialist@make-it-all.co.uk	Technical Specialist	KB specialist, DevOps expert
6	Frank Miller	frank.designer@make-it-all.co.uk	Team Member	Designer on Mobile App project

#	Name	Email	Role	Purpose
7	Grace Taylor	grace.tester@make-it-all.co.uk	Team Member	QA tester, frontend developer
8	Henry Anderson	henry.analyst@make-it-all.co.uk	Team Member	Backend developer, data analyst
9	Iris Chen	iris.pm@make-it-all.co.uk	Team Leader	Project manager for API project
10	Jack Wilson	jack.security@make-it-all.co.uk	Technical Specialist	Security specialist

## Comprehensive Dummy Data

Run these SQL statements to populate the database with extensive test data:

```
-- =====
-- USERS
-- =====
-- Password hash for 'Password123!'
SET @pw = '$2y$12$HxjFRWlMRdll/4IZR4ur4eIenbGY.lV4DzIhSQNaEU3zLy20q5M1a';

INSERT IGNORE INTO users (email, password_hash, is_registered, first_name, last_name, role, specialties, profile_picture) VALUES
('alice.manager@make-it-all.co.uk', @pw, TRUE, 'Alice', 'Johnson', 'manager', ['Project Management", "Strategy", "Leadership", "Budgeting"], '/default-avatar.png'),
('bob.lead@make-it-all.co.uk', @pw, TRUE, 'Bob', 'Smith', 'team_leader', ['Backend", "Python", "SQL", "API Design", "Django"], '/default-avatar.png'),
('carol.dev@make-it-all.co.uk', @pw, TRUE, 'Carol', 'Williams', 'team_member', ['Frontend", "React", "CSS", "JavaScript", "TypeScript"], '/default-avatar.png'),
('dave.dev@make-it-all.co.uk', NULL, FALSE, 'Dave', 'Brown', 'team_member', ['Backend", "Node.js", "MongoDB", "Express"], '/default-avatar.png'),
('emma.specialist@make-it-all.co.uk', @pw, TRUE, 'Emma', 'Davis', 'technical_specialist', ['DevOps", "AWS", "Docker", "CI/CD", "Kubernetes"], '/default-avatar.png'),
('frank.designer@make-it-all.co.uk', @pw, TRUE, 'Frank', 'Miller', 'team_member', ['UI Design", "Figma", "Prototyping", "CSS", "Adobe XD"], '/default-avatar.png'),
('grace.tester@make-it-all.co.uk', @pw, TRUE, 'Grace', 'Taylor', 'team_member', ['Frontend", "JavaScript", "React", "Node.js", "Testing"], '/default-avatar.png'),
('henry.analyst@make-it-all.co.uk', @pw, TRUE, 'Henry', 'Anderson', 'team_member', ['SQL", "Python", "Backend", "API Design", "Data Analysis"], '/default-avatar.png'),
('iris.pm@make-it-all.co.uk', @pw, TRUE, 'Iris', 'Chen', 'team_leader', ['Project Management", "Agile", "Scrum", "API Design", "Documentation"], '/default-avatar.png'),
```

```
('jack.security@make-it-all.co.uk', @pw, TRUE, 'Jack', 'Wilson',
'technical_specialist', ['Security", "Penetration
Testing", "OAuth", "Encryption", "Compliance"]', '/default-avatar.png');

-- =====
-- PROJECTS
-- =====

INSERT IGNORE INTO projects (project_name, description, status, deadline,
created_by, team_leader_id) VALUES
('Website Redesign', 'Complete overhaul of the company website with new
branding, improved UX, and modern tech stack. Includes responsive design
for mobile and tablet.', 'active', '2025-12-15', 1, 2),
('Mobile App Development', 'Native mobile app for iOS and Android
platforms with offline capabilities, push notifications, and biometric
authentication.', 'active', '2025-11-30', 1, 2),
('Internal Tools Upgrade', 'Modernize internal dashboards and reporting
tools, integrate with Salesforce and analytics platforms.', 'active',
'2026-01-31', 1, 2),
('REST API V2', 'Design and implement RESTful API v2 with improved
authentication, rate limiting, and comprehensive documentation.',
'active', '2026-02-28', 1, 9),
('Cloud Migration', 'Migrate on-premise infrastructure to AWS cloud with
zero downtime and improved scalability.', 'active', '2026-03-15', 1, 5),
('Security Audit', 'Comprehensive security audit of all systems,
penetration testing, and implementation of security improvements.',
'active', '2025-12-30', 1, 10),
('E-commerce Platform', 'Build new e-commerce platform with payment
processing, inventory management, and customer portal.', 'archived',
'2024-08-30', 1, 9),
('Legacy System Decommission', 'Phase out old CRM system and migrate data
to new platform.', 'archived', '2024-11-15', 1, 2);

-- =====
-- PROJECT MEMBERS
-- =====

-- Website Redesign (project 1) - 5 members
INSERT IGNORE INTO project_members (project_id, user_id, project_role)
VALUES
(1, 2, 'team_leader'),
(1, 3, 'member'),
(1, 6, 'member'),
(1, 7, 'member'),
(1, 10, 'member'),
-- Mobile App Development (project 2) - 5 members
(2, 2, 'team_leader'),
(2, 3, 'member'),
(2, 5, 'member'),
(2, 6, 'member'),
(2, 8, 'member'),
-- Internal Tools (project 3) - 4 members
(3, 2, 'team_leader'),
(3, 3, 'member'),
(3, 5, 'member'),
(3, 8, 'member'),
```

```
-- REST API V2 (project 4) - 6 members
(4, 9, 'team_leader'),
(4, 2, 'member'),
(4, 8, 'member'),
(4, 10, 'member'),
(4, 3, 'member'),
(4, 7, 'member'),
-- Cloud Migration (project 5) - 3 members
(5, 5, 'team_leader'),
(5, 2, 'member'),
(5, 10, 'member'),
-- Security Audit (project 6) - 4 members
(6, 10, 'team_leader'),
(6, 5, 'member'),
(6, 2, 'member'),
(6, 8, 'member'),
-- E-commerce Platform (archived) - 3 members
(7, 9, 'team_leader'),
(7, 3, 'member'),
(7, 8, 'member'),
-- Legacy System Decommission (archived) - 2 members
(8, 2, 'team_leader'),
(8, 8, 'member');

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-- TASKS - Website Redesign (Project 1)
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INSERT IGNORE INTO tasks (task_name, description, project_id, status,
priority, deadline, created_by, created_date) VALUES
-- Completed tasks
('Design homepage mockup', 'Create Figma mockups for the new homepage design with hero section, feature highlights, and testimonials', 1,
'completed', 'high', '2025-10-30', 1, '2025-09-15'),
('Brand guidelines document', 'Finalize brand guidelines including color palette, typography, logo usage, and tone of voice', 1, 'completed',
'high', '2025-10-25', 1, '2025-09-10'),
('User research interviews', 'Conduct 10 user interviews to understand pain points with current website', 1, 'completed', 'medium', '2025-10-20',
1, '2025-09-08'),
('Wireframes for all pages', 'Create low-fidelity wireframes for homepage, about, services, contact, and blog pages', 1, 'completed', 'high', '2025-10-28',
1, '2025-09-12'),
-- In Progress tasks
('Implement navigation bar', 'Build responsive navbar component with dropdown menus, mobile hamburger menu, and accessibility features', 1,
'in_progress', 'high', '2025-11-10', 1, '2025-09-20'),
('Redesign footer section', 'Update footer with new links, social media icons, newsletter signup, and company information', 1, 'in_progress',
'low', '2025-11-15', 1, '2025-10-05'),
('Accessibility compliance', 'Ensure WCAG 2.1 AA compliance across all pages, including keyboard navigation and screen reader support', 1,
'in_progress', 'high', '2025-11-25', 1, '2025-10-15'),
('Performance optimization', 'Optimize images, implement lazy loading, code splitting, and improve Core Web Vitals scores', 1, 'in_progress',
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'medium', '2025-11-20', 1, '2025-10-18'),  
-- To Do tasks  
('Setup CI/CD pipeline', 'Configure GitHub Actions for automated testing, linting, and deployment to staging and production', 1, 'to_do', 'medium', '2025-11-20', 1, '2025-09-25'),  
('Write unit tests for auth', 'Unit tests for login, register, password reset, and session management with 90% coverage', 1, 'to_do', 'medium', '2025-11-25', 1, '2025-10-01'),  
('Blog system implementation', 'Build blog CMS with markdown support, categories, tags, and SEO optimization', 1, 'to_do', 'low', '2025-12-01', 1, '2025-10-10'),  
('Contact form backend', 'Implement contact form with spam protection, email notifications, and database logging', 1, 'to_do', 'medium', '2025-11-18', 1, '2025-10-12'),  
('Analytics integration', 'Integrate Google Analytics 4 and configure custom events for conversion tracking', 1, 'to_do', 'low', '2025-11-22', 1, '2025-10-20');  
  
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--- TASKS – Mobile App Development (Project 2)  
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INSERT IGNORE INTO tasks (task_name, description, project_id, status, priority, deadline, created_by, created_date) VALUES  
-- Completed tasks  
('Setup React Native project', 'Initialize project with proper folder structure, ESLint, Prettier, and TypeScript configuration', 2, 'completed', 'high', '2025-10-15', 1, '2025-09-10'),  
('Design system foundation', 'Create reusable UI components library with consistent styling and theming support', 2, 'completed', 'high', '2025-10-22', 1, '2025-09-14'),  
('Authentication flow design', 'Design user flows for login, registration, password reset, and biometric authentication', 2, 'completed', 'high', '2025-10-28', 1, '2025-09-16'),  
-- In Progress tasks  
('Build login screen', 'Implement login UI with email/password fields, social login buttons, and remember me option', 2, 'in_progress', 'high', '2025-11-05', 1, '2025-09-18'),  
('Offline mode implementation', 'Implement offline data persistence using AsyncStorage and sync when connection restores', 2, 'in_progress', 'high', '2025-11-12', 1, '2025-10-01'),  
('User profile screen', 'Build profile screen with avatar upload, personal info editing, and account settings', 2, 'in_progress', 'medium', '2025-11-08', 1, '2025-10-05'),  
-- To Do tasks  
('API integration layer', 'Create API service layer for backend communication with retry logic and error handling', 2, 'to_do', 'high', '2025-11-20', 1, '2025-09-22'),  
('Push notifications', 'Implement push notification system for iOS and Android using Firebase Cloud Messaging', 2, 'to_do', 'medium', '2025-12-01', 1, '2025-10-01'),  
('Biometric authentication', 'Add Face ID and fingerprint authentication support for iOS and Android', 2, 'to_do', 'high', '2025-11-15', 1, '2025-10-08'),  
('App Store submission', 'Prepare app metadata, screenshots, privacy
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policy, and submit to App Store and Play Store', 2, 'to_do', 'high',
'2025-11-28', 1, '2025-10-20'),
('Deep linking', 'Implement deep linking for seamless navigation from web
to app', 2, 'to_do', 'low', '2025-12-05', 1, '2025-10-15'),
('Crash reporting', 'Integrate Sentry for crash reporting and performance
monitoring', 2, 'to_do', 'medium', '2025-11-18', 1, '2025-10-12');

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-- TASKS - Internal Tools Upgrade (Project 3)
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INSERT IGNORE INTO tasks (task_name, description, project_id, status,
priority, deadline, created_by, created_date) VALUES
-- Completed tasks
('Dashboard wireframes', 'Design wireframes for the new analytics
dashboard with KPI cards and charts', 3, 'completed', 'medium', '2025-10-
25', 1, '2025-09-12'),
('Database schema design', 'Design optimized database schema for reporting
and analytics with proper indexing', 3, 'completed', 'high', '2025-10-30',
1, '2025-09-15'),
-- In Progress tasks
('Reporting API endpoints', 'Build REST API endpoints for generating
reports with filters, pagination, and export options', 3, 'in_progress',
'high', '2025-11-30', 1, '2025-09-28'),
('Chart component library', 'Create reusable chart components using
Chart.js for line, bar, and pie charts', 3, 'in_progress', 'medium',
'2025-11-15', 1, '2025-10-05'),
-- To Do tasks
('Data migration script', 'Write Python script to migrate data from old
system with data validation and error handling', 3, 'to_do', 'high',
'2025-12-15', 1, '2025-10-10'),
('Salesforce integration', 'Integrate with Salesforce API for real-time
data sync', 3, 'to_do', 'high', '2025-12-20', 1, '2025-10-12'),
('Export to Excel', 'Add functionality to export reports to Excel with
formatting and charts', 3, 'to_do', 'medium', '2025-12-10', 1, '2025-10-
18'),
('Email report scheduling', 'Implement scheduled email reports with
customizable frequency and recipients', 3, 'to_do', 'low', '2025-12-28',
1, '2025-10-22'),
('Dashboard personalization', 'Allow users to customize dashboard layout
and save widget preferences', 3, 'to_do', 'low', '2026-01-15', 1, '2025-
10-25');

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-- TASKS - REST API V2 (Project 4)
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INSERT IGNORE INTO tasks (task_name, description, project_id, status,
priority, deadline, created_by, created_date) VALUES
-- Completed tasks
('API specification document', 'Write OpenAPI 3.0 specification with all
endpoints, request/response schemas, and examples', 4, 'completed',
'high', '2025-11-05', 1, '2025-09-20'),
('Authentication redesign', 'Design OAuth 2.0 + JWT authentication flow
with refresh tokens', 4, 'completed', 'high', '2025-11-08', 1, '2025-09-
22'),
```

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-- In Progress tasks
('Rate limiting implementation', 'Implement rate limiting with Redis, different tiers for API keys', 4, 'in_progress', 'high', '2025-11-20', 1, '2025-10-01'),
('Versioning strategy', 'Implement API versioning via URL path with backward compatibility for v1', 4, 'in_progress', 'medium', '2025-11-18', 1, '2025-10-05'),
('Error handling standardization', 'Standardize error responses with consistent structure and helpful messages', 4, 'in_progress', 'high', '2025-11-22', 1, '2025-10-08'),
-- To Do tasks
('Webhook system', 'Build webhook system for real-time event notifications to client applications', 4, 'to_do', 'medium', '2025-12-05', 1, '2025-10-10'),
('API documentation site', 'Create interactive API documentation using Swagger UI with code examples', 4, 'to_do', 'high', '2025-12-01', 1, '2025-10-12'),
('SDK for JavaScript', 'Develop official JavaScript/TypeScript SDK for the API', 4, 'to_do', 'medium', '2025-12-15', 1, '2025-10-15'),
('SDK for Python', 'Develop official Python SDK with async support', 4, 'to_do', 'medium', '2025-12-20', 1, '2025-10-18'),
('Load testing', 'Perform load testing with 10,000 concurrent users and optimize bottlenecks', 4, 'to_do', 'high', '2026-01-10', 1, '2025-10-20');

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-- TASKS - Cloud Migration (Project 5)
--- =====
INSERT IGNORE INTO tasks (task_name, description, project_id, status, priority, deadline, created_by, created_date) VALUES
-- Completed tasks
('AWS account setup', 'Setup AWS Organization, accounts for dev/staging/prod, and IAM policies', 5, 'completed', 'high', '2025-10-20', 1, '2025-09-15'),
('Infrastructure as Code', 'Write Terraform scripts for VPC, subnets, security groups, and load balancers', 5, 'completed', 'high', '2025-10-28', 1, '2025-09-18'),
-- In Progress tasks
('Database migration plan', 'Create detailed plan for migrating PostgreSQL to RDS with minimal downtime', 5, 'in_progress', 'high', '2025-11-25', 1, '2025-10-01'),
('Docker containerization', 'Containerize all services and create Kubernetes deployment manifests', 5, 'in_progress', 'high', '2025-11-30', 1, '2025-10-05'),
('Monitoring setup', 'Setup CloudWatch, Prometheus, and Grafana for comprehensive monitoring', 5, 'in_progress', 'medium', '2025-12-05', 1, '2025-10-10'),
-- To Do tasks
('Load balancer configuration', 'Configure Application Load Balancer with health checks and SSL certificates', 5, 'to_do', 'high', '2025-12-10', 1, '2025-10-12'),
('Auto-scaling setup', 'Implement auto-scaling policies based on CPU and memory metrics', 5, 'to_do', 'high', '2025-12-15', 1, '2025-10-15'),
('Backup strategy', 'Implement automated backups with retention policies and disaster recovery plan', 5, 'to_do', 'high', '2025-12-20', 1, '2025-
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10-18'),  
('Cost optimization', 'Analyze and optimize AWS costs, implement Reserved Instances where applicable', 5, 'to_do', 'medium', '2026-01-05', 1, '2025-10-20'),  
('Documentation', 'Document architecture, deployment procedures, and troubleshooting guides', 5, 'to_do', 'medium', '2026-01-15', 1, '2025-10-22');  
  
-- ======  
-- TASKS - Security Audit (Project 6)  
-- ======  
INSERT IGNORE INTO tasks (task_name, description, project_id, status, priority, deadline, created_by, created_date) VALUES  
-- Completed tasks  
('Security policy review', 'Review and update security policies for access control, data handling, and incident response', 6, 'completed', 'high', '2025-10-25', 1, '2025-09-18'),  
('Vulnerability scanning', 'Run automated vulnerability scans using OWASP ZAP and Nessus', 6, 'completed', 'high', '2025-10-30', 1, '2025-09-20'),  
-- In Progress tasks  
('Penetration testing', 'Conduct manual penetration testing of web applications and APIs', 6, 'in_progress', 'high', '2025-11-20', 1, '2025-10-01'),  
('Code security audit', 'Review codebase for security vulnerabilities, SQL injection, XSS, CSRF', 6, 'in_progress', 'high', '2025-11-25', 1, '2025-10-05'),  
-- To Do tasks  
('Fix critical vulnerabilities', 'Address all critical and high severity vulnerabilities found during audit', 6, 'to_do', 'high', '2025-12-05', 1, '2025-10-08'),  
('Implement 2FA', 'Add two-factor authentication support for all user accounts', 6, 'to_do', 'high', '2025-12-10', 1, '2025-10-10'),  
('Security training', 'Conduct security awareness training for all developers', 6, 'to_do', 'medium', '2025-12-15', 1, '2025-10-12'),  
('Compliance documentation', 'Prepare documentation for SOC 2 and GDPR compliance', 6, 'to_do', 'high', '2025-12-20', 1, '2025-10-15'),  
('Incident response plan', 'Create comprehensive incident response plan with on-call rotation', 6, 'to_do', 'medium', '2025-12-28', 1, '2025-10-18');  
  
-- ======  
-- TASK ASSIGNMENTS  
-- ======  
INSERT IGNORE INTO task_assignments (task_id, user_id, assigned_by, user_status) VALUES  
-- Website Redesign assignments (tasks 1-13)  
(1, 6, 1, 'completed'),  
(2, 6, 1, 'completed'),  
(3, 3, 1, 'completed'),  
(4, 6, 1, 'completed'),  
(5, 3, 1, 'working'),  
(5, 7, 1, 'working'),  
(6, 6, 1, 'working'),  
(7, 3, 1, 'working'),
```

```
(7, 10, 1, 'working'),
(8, 5, 1, 'working'),
(9, 5, 1, 'not_started'),
(10, 3, 1, 'not_started'),
(10, 7, 1, 'not_started'),
(11, 3, 1, 'not_started'),
(12, 2, 1, 'not_started'),
(13, 7, 1, 'not_started'),
-- Mobile App assignments (tasks 14–25)
(14, 5, 1, 'completed'),
(15, 6, 1, 'completed'),
(16, 6, 1, 'completed'),
(17, 6, 1, 'working'),
(18, 5, 1, 'working'),
(18, 8, 1, 'working'),
(19, 3, 1, 'working'),
(20, 8, 1, 'not_started'),
(21, 5, 1, 'not_started'),
(22, 5, 1, 'not_started'),
(23, 6, 1, 'not_started'),
(24, 3, 1, 'not_started'),
(25, 5, 1, 'not_started'),
-- Internal Tools assignments (tasks 26–34)
(26, 8, 1, 'completed'),
(27, 8, 1, 'completed'),
(28, 8, 1, 'working'),
(28, 3, 1, 'working'),
(29, 3, 1, 'working'),
(30, 8, 1, 'not_started'),
(31, 5, 1, 'not_started'),
(32, 8, 1, 'not_started'),
(33, 2, 1, 'not_started'),
(34, 3, 1, 'not_started'),
-- REST API V2 assignments (tasks 35–44)
(35, 9, 1, 'completed'),
(36, 10, 1, 'completed'),
(37, 2, 1, 'working'),
(37, 8, 1, 'working'),
(38, 9, 1, 'working'),
(39, 2, 1, 'working'),
(40, 8, 1, 'not_started'),
(41, 9, 1, 'not_started'),
(42, 3, 1, 'not_started'),
(43, 7, 1, 'not_started'),
(44, 2, 1, 'not_started'),
-- Cloud Migration assignments (tasks 45–54)
(45, 5, 1, 'completed'),
(46, 5, 1, 'completed'),
(47, 5, 1, 'working'),
(47, 2, 1, 'working'),
(48, 5, 1, 'working'),
(49, 5, 1, 'working'),
(50, 5, 1, 'not_started'),
(51, 5, 1, 'not_started'),
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(52, 5, 1, 'not_started'),
(52, 2, 1, 'not_started'),
(53, 5, 1, 'not_started'),
(54, 5, 1, 'not_started'),
-- Security Audit assignments (tasks 55–63)
(55, 10, 1, 'completed'),
(56, 10, 1, 'completed'),
(57, 10, 1, 'working'),
(58, 10, 1, 'working'),
(58, 2, 1, 'working'),
(59, 10, 1, 'not_started'),
(59, 2, 1, 'not_started'),
(60, 10, 1, 'not_started'),
(60, 8, 1, 'not_started'),
(61, 10, 1, 'not_started'),
(62, 10, 1, 'not_started'),
(63, 10, 1, 'not_started');

-- =====
-- KNOWLEDGE BASE TOPICS
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INSERT IGNORE INTO kb_topics (topic_name, description, created_by) VALUES
('General Discussion', 'Open discussions about company and team topics, announcements, and team building', 1),
('Technical Help', 'Ask for help with technical issues, bugs, errors, and troubleshooting', 1),
('Best Practices', 'Share and discuss development best practices, code standards, and methodologies', 1),
('Project Updates', 'Updates and announcements about ongoing projects, milestones, and achievements', 1),
('DevOps & Infrastructure', 'Discussions about deployment, CI/CD, cloud infrastructure, and monitoring', 1),
('Security & Compliance', 'Security best practices, vulnerability reports, and compliance requirements', 1),
('Career Development', 'Learning resources, certifications, career advice, and professional growth', 1),
('Tools & Resources', 'Share useful tools, libraries, frameworks, and development resources', 1);

-- =====
-- KNOWLEDGE BASE POSTS
-- =====

INSERT IGNORE INTO kb_posts (title, content, topic_id, author_id, tags, like_count, comment_count) VALUES
-- General Discussion
('Welcome to Make-It-All!', 'Hello everyone! This is our new knowledge base platform. Feel free to ask questions, share knowledge, and help each other out.\n\nLet's make this a great resource for our team. Remember to:\n- Search before posting to avoid duplicates\n- Use descriptive titles\n- Tag your posts appropriately\n- Be respectful and constructive\n\nLooking forward to seeing this grow!', 1, 1,
['welcome', 'announcement', 'guidelines'], 18, 5),
('Team lunch next Friday!', 'Reminder that we have our monthly team lunch next Friday at 12:30 PM at The Italian Place downtown.\n\nPlease RSVP in
```

the Slack channel by Wednesday so we can get an accurate headcount.

Dietary restrictions? Let me know!

Looking forward to seeing everyone there!', 1, 1, '["social","lunch","event"]', 12, 3),  
('New meeting room booking system', 'We have launched a new meeting room booking system! You can now book rooms through the company portal.\n\nFeatures:\n- See real-time availability\n- Recurring bookings\n- Automatic calendar invites\n- Equipment requests\n\nCheck it out at <https://rooms.make-it-all.co.uk>', 1, 1,  
'["announcement","facilities","tools"]', 8, 2),  
-- Technical Help  
('How to setup the development environment', 'Step 1: Clone the repository\n```\nbash\ngit clone https://github.com/make-it-all/main-app.git\nncd main-app\n```\nStep 2: Install dependencies\n```\nbash\nnpm install\n```  
Step 3: Configure your .env file\n```\nbash\nncp .env.example .env\n# Edit .env with your database credentials\n```  
Step 4: Start the dev server\n```\nbash\nnpm run dev\n```\nMake sure you have Node.js v18+ installed. For Windows users, use Git Bash or WSL2.', 2, 3,  
'["setup","development","guide","getting-started"]', 15, 4),  
('Debugging CORS issues in API calls', 'If you are getting CORS errors when making API calls from the frontend:\n1. Make sure the API server includes proper CORS headers:\n```\njavascript\nres.header("Access-Control-Allow-Origin", process.env.FRONTEND\_URL);\nres.header("Access-Control-Allow-Credentials", "true");\n```  
2. For development, you can use the proxy in vite.config.js:\n```\njavascript\nserver: {\n proxy: {\n "/api": "http://localhost:3000"\n }\n}\n```  
3. For production, ensure your API domain is whitelisted in the CORS config.\n\nStill having issues? Check the network tab for the actual error response.', 2, 8,  
'["cors","api","debugging","frontend","backend"]', 11, 2),  
(('Database connection pool exhaustion', 'Ran into an issue today where our database connection pool was getting exhausted under load.\n\nThe problem: We were not properly closing database connections in error handlers.\n\nThe solution:\n```\njavascript\ntry {\n const result = await db.query(sql);\n return result;\n} catch (error) {\n console.error(error);\n throw error;\n}\nfinally {\n // IMPORTANT: Always release connection\n await db.release();\n}\n```\nAlso increased pool size from 10 to 20 in production config. Monitoring shows much better performance now.', 2, 2, '["database","mysql","connection-pool","performance"]', 9, 1),  
-- Best Practices  
('Git branching strategy', 'We use the following branching strategy:\n\n\*\*Main Branches:\*\*\n- `main`: production-ready code, protected, requires PR + review\n- `develop`: integration branch for features, auto-deployed to staging\n\n\*\*Supporting Branches:\*\*\n- `feature/\*`: new features (e.g., feature/user-authentication)\n- `bugfix/\*`: bug fixes for develop\n- `hotfix/\*`: urgent production fixes, branch from main\n- `release/\*`: release preparation (version bump, final fixes)\n\n\*\*Workflow:\*\*\n1. Create feature branch from develop\n2. Make changes and commit regularly\n3. Push and create PR to develop\n4. Get at least one review\n5. Squash and merge to develop\n\n\*\*Commit Messages:\*\*\nFollow conventional commits format:\n- `feat`: add user login\n- `fix`: resolve navbar mobile bug\n- `docs`: update API documentation\n- `test`: add unit tests for auth\n\n`['git','branching','workflow','version-control']', 22, 3),  
(('React component best practices', 'Here are some tips for writing clean

React components:  
1. Keep components small and focused  
Each component should do one thing well. If a component is getting too large, split it.  
2. Use custom hooks for shared logic  
Good example  

```
function useAuth() {  
  const [user, setUser] = useState(null);  
  // ... auth logic  
  return { user, login, logout };  
}
```

3. Prefer composition over inheritance  
Good example  

```
<Card>  
  <CardHeader title="Hello" />  
  <CardBody>Content</CardBody>  
</Card>
```

4. Use TypeScript for type safety  
Define prop types and interfaces for better autocomplete and error catching.  
5. Write tests for critical components  
Use React Testing Library for component tests, focus on user behavior not implementation.  
'', 3, 3, ''["react", "frontend", "best-practices", "typescript"]'', 14, 2),  
('API error handling patterns', 'Consistent error handling makes debugging easier. Here is our standard approach:',  
(Express):  

```
class ApiError extends Error {  
  constructor(statusCode, message, details = null) {  
    super(message);  
    this.statusCode = statusCode;  
    this.details = details;  
  }  
}  
app.use((err, req, res, next) => {  
  const status = err.statusCode || 500;  
  res.status(status).json({  
    error: {  
      message: err.message,  
      status: status,  
      details: err.details  
    }  
  });  
})
```

Frontend:  

```
try {  
  const res = await fetch("/api/users");  
  if (!res.ok) {  
    const error = await res.json();  
    throw new Error(error.error.message);  
  }  
  return await res.json();  
} catch (error) {  
  showNotification(error.message, "error");  
}
```

Always return consistent error structures!', 3, 2, ''["api", "error-handling", "backend", "best-practices"]'', 17, 1),  
('Code review checklist', 'Use this checklist when reviewing PRs:  
- Functionality: Code works as intended  
- Edge cases handled  
- No obvious bugs  
- Code Quality: Easy to read and understand  
- Follows project conventions  
- No code duplication  
- Appropriate comments  
- Testing: Unit tests included  
- Tests actually test the right things  
- Edge cases covered  
- Security: No hardcoded secrets  
- Input validation  
- SQL injection prevention  
- XSS prevention  
- Performance: No unnecessary database calls  
- Efficient algorithms  
- Images optimized  
- Documentation: README updated if needed  
- API docs updated  
- Complex logic explained  
- Do not be afraid to ask questions!', 3, 1, ''["code-review", "checklist", "best-practices", "quality"]'', 19, 2),  
-- Project Updates  
('Website Redesign - Progress Update', 'Great progress on the website redesign project this sprint!  
- Completed: All homepage mockups finalized  
- Brand guidelines approved  
- User research completed  
- In Progress: Navigation bar implementation  
- Footer redesign  
- Accessibility compliance audit  
- Upcoming: CI/CD pipeline setup  
- Blog system implementation  
- Blockers: None currently!  
We are on track for the December 15th deadline. Great work team!', 4, 2, ''["website-redesign", "progress", "update"]'', 16, 4),  
('Mobile App - Beta Testing Next Week', 'Exciting news! We are ready to start beta testing the mobile app next week.  
- What we need from you:  
- Install TestFlight (iOS) or join the beta program (Android)  
- Test core features: login, profile, offline mode  
- Report any bugs or UX issues  
I will send out detailed testing instructions on Monday. Looking forward to your feedback!  
Big thanks to Frank, Emma, and Henry for

getting us to this point!', 4, 2, '["mobile-app","beta","testing","announcement"]', 13, 2),  
-- DevOps & Infrastructure  
('Docker setup for local development', 'To run the app locally with Docker:\n\n\*\*Prerequisites:\*\*\n- Docker Desktop installed\n- At least 4GB RAM allocated to Docker\n\n\*\*Setup:\*\*\n```\nbash\n# Clone and navigate to project\ngit clone https://github.com/make-it-all/main-app.git\ncd main-app\n\n# Copy environment file\ncp .env.example .env\n\n# Start all services\ndocker-compose up -d\n```\n\*\*Services:\*\*\n- MySQL: localhost:3306\n- PHP/Apache: localhost:8080\n- phpMyAdmin: localhost:8081\n\n\*\*Useful commands:\*\*\n```\nbash\n# View logs\ndocker-compose logs -f\n\n# Restart services\ndocker-compose restart\n\n# Stop all services\ndocker-compose down\n\n# Rebuild after config changes\ndocker-compose up -d --build\n```\nIf you get permission errors on Linux, add your user to the docker group.', 5, 5,  
'["docker","devops","setup","local-development"]', 20, 3),  
('CI/CD pipeline overview', 'Our CI/CD pipeline runs on GitHub Actions with these stages:\n\n\*\*On Pull Request:\*\*\n1. Linting (ESLint, Prettier)\n2. Unit tests (Jest)\n3. Integration tests\n4. Build verification\n5. Security scan (npm audit)\n\n\*\*On Merge to Develop:\*\*\n1. Run full test suite\n2. Build Docker image\n3. Push to container registry\n4. Deploy to staging\n5. Run smoke tests\n\n\*\*On Merge to Main:\*\*\n1. Create release tag\n2. Build production image\n3. Deploy to production (blue-green)\n4. Run health checks\n5. Notify team in Slack\n\n\*\*Rollback:\*\*\nIf deployment fails, previous version is automatically restored.\n\n\*\*Average deploy time:\*\* 8 minutes', 5, 5,  
'["cicd","github-actions","deployment","automation"]', 11, 1),  
('Monitoring and alerting setup', 'Our monitoring stack:\n\n\*\*Application Monitoring:\*\*\n- New Relic for APM\n- Sentry for error tracking\n- Custom metrics to CloudWatch\n\n\*\*Infrastructure Monitoring:\*\*\n- CloudWatch for AWS resources\n- Grafana dashboards\n- Uptime monitoring with Pingdom\n\n\*\*Alerts:\*\*\nSlack notifications for:\n- Error rate > 1%\n- Response time > 2s (p95)\n- CPU usage > 80%\n- Disk space < 20%\n- Failed deployments\n\n\*\*On-Call Rotation:\*\*\nPagerDuty for critical alerts (P1)\nWeekly rotation schedule\nAll dashboards accessible at <https://monitoring.make-it-all.co.uk>', 5, 5,  
'["monitoring","alerting","observability","cloudwatch"]', 7, 1),  
-- Security & Compliance  
('Security best practices checklist', 'Follow these security best practices for all projects:\n\n\*\*Authentication:\*\*\n- Use bcrypt for password hashing (cost factor 12+)\n- Implement rate limiting on auth endpoints\n- Support 2FA\n- Session timeout after 30 min inactivity\n\n\*\*Authorization:\*\*\n- Principle of least privilege\n- Role-based access control\n- Validate permissions on every request\n\n\*\*Data Protection:\*\*\n- Encrypt sensitive data at rest\n- Use HTTPS everywhere\n- Sanitize user inputs\n- Parameterized SQL queries\n\n\*\*API Security:\*\*\n- API key authentication\n- Rate limiting\n- Input validation\n- CORS configuration\n\n\*\*Dependencies:\*\*\n- Regular npm audit\n- Automated dependency updates\n- Review third-party packages\n\nSee the full security policy in the wiki.', 6, 10, '["security","best-practices","checklist","compliance"]', 15, 2),  
('OWASP Top 10 for web developers', 'Understanding the OWASP Top 10 vulnerabilities:\n\n\*\*1. Broken Access Control\*\*\nAlways verify permissions server-side, never trust client.\n\n\*\*2. Cryptographic')

Failures\*\*\nUse TLS everywhere, bcrypt for passwords, never roll your own crypto.\n\n\*\*3. Injection\*\*\nUse parameterized queries, ORM, input validation.\n\n\*\*4. Insecure Design\*\*\nThreat model during design phase, principle of least privilege.\n\n\*\*5. Security Misconfiguration\*\*\nDisable debug mode in production, remove default accounts.\n\n\*\*6. Vulnerable Components\*\*\nKeep dependencies updated, use npm audit.\n\n\*\*7. Authentication Failures\*\*\nImplement MFA, rate limiting, secure session management.\n\n\*\*8. Software Integrity Failures\*\*\nVerify dependencies, use code signing.\n\n\*\*9. Logging Failures\*\*\nLog security events, monitor for anomalies.\n\n\*\*10. SSRF\*\*\nValidate and sanitize URLs, use allowlists.\n\nSee <https://owasp.org/Top10> for details.', 6, 10, ['"security"', "owasp", "vulnerabilities", "education"]], 12, 1),  
-- Career Development  
('Recommended learning resources', 'Here are some great resources for professional development:\n\n\*\*Online Courses:\*\*\n- Frontend Masters (React, TypeScript, Node.js)\n- Udemy (specific tech deep dives)\n- Pluralsight (enterprise software skills)\n- AWS Training and Certification\n\n\*\*Books:\*\*\n- "Clean Code" by Robert Martin\n- "Designing Data-Intensive Applications" by Martin Kleppmann\n- "The Pragmatic Programmer" by Hunt & Thomas\n- "System Design Interview" by Alex Xu\n\n\*\*Newsletters:\*\*\n- JavaScript Weekly\n- Node Weekly\n- React Status\n- TLDR Newsletter\n\n\*\*YouTube Channels:\*\*\n- Fireship (quick tech overviews)\n- Web Dev Simplified\n- Theo - t3.gg\n\n\*\*Podcasts:\*\*\n- Syntax.fm\n- Shop Talk Show\n- JS Party\n\nCompany reimburses \$500/year for learning materials!', 7, 1, ['"learning"', "resources", "career", "professional-development"]], 16, 5),  
('AWS certification path', 'Planning to get AWS certified? Here is a recommended path:\n\n\*\*Beginner:\*\*\n1. AWS Certified Cloud Practitioner\n- Good overview of AWS services\n- Not technical, focused on business value\n- Takes approximately 2 weeks to prepare\n\n\*\*Intermediate:\*\*\n2. AWS Certified Solutions Architect – Associate\n- Most popular certification\n- Covers architecture best practices\n- Takes approximately 1–2 months to prepare\n\n\*\*Advanced:\*\*\n3. AWS Certified Solutions Architect – Professional\nOR\n3. AWS Certified DevOps Engineer – Professional\n- Very challenging\n- Deep technical knowledge required\n- Takes approximately 3–4 months to prepare\n\n\*\*Study Resources:\*\*\n- A Cloud Guru courses\n- AWS free tier for hands-on practice\n- AWS whitepapers\n- Practice exams\n\nCompany covers certification exam costs!', 7, 5, ['"aws"', "certification", "career", "learning"]], 10, 3),  
-- Tools & Resources  
('VS Code extensions for web development', 'Essential VS Code extensions we recommend:\n\n\*\*Productivity:\*\*\n- GitLens (advanced Git integration)\n- Auto Rename Tag\n- Prettier (code formatting)\n- ESLint\n- Path Intellisense\n\n\*\*React/Frontend:\*\*\n- ES7+ React snippets\n- Tailwind CSS IntelliSense\n- CSS Peek\n\n\*\*Backend:\*\*\n- REST Client (API testing in VS Code)\n- Database Client\n- Docker\n\n\*\*Themes:\*\*\n- One Dark Pro\n- Material Icon Theme\n\n\*\*Other:\*\*\n- Live Share (pair programming)\n- TODO Highlight\n- Better Comments\n\nSettings sync across devices using GitHub!', 8, 3, ['"vscode"', "tools", "extensions", "productivity"]], 13, 2),  
('Useful npm packages for Node.js', 'Here are npm packages we use frequently:\n\n\*\*Express Middleware:\*\*\n- helmet (security headers)\n- cors (CORS handling)\n- express-rate-limit (rate limiting)\n- express-

```
validator (input validation)\n- morgan (HTTP logging)\n\n**Utilities:**\n- lodash (utility functions)\n- date-fns (date manipulation)\n- axios (HTTP client)\n- dotenv (environment variables)\n- uuid (unique ID generation)\n\n**Database:**\n- mysql2 (MySQL client)\n- mongoose (MongoDB ODM)\n- sequelize (SQL ORM)\n\n**Testing:**\n- jest (test framework)\n- supertest (API testing)\n- @testing-library/react\n\n**Dev Tools:**\n- nodemon (auto-restart)\n- eslint\n- prettier\n\nAlways check npm trends before adding dependencies!', 8, 2, ['[{"npm": "nodejs", "version": "14.17.0"}, {"npm": "nodejs", "version": "14.17.0"}], 9, 1),\n('Chrome DevTools tips and tricks', 'Level up your debugging with these Chrome DevTools tips:\n\n**Console:**\n- Use `console.table()` for arrays/objects\n- `$_` references selected DOM element\n- `$_` returns last evaluated expression\n- `monitor(function)` logs function calls\n\n**Network:**\n- Right-click and Copy as fetch for API replay\n- Filter by domain: `domain:make-it-all.co.uk`\n- Throttle network to test slow connections\n\n**Sources:**\n- Conditional breakpoints (right-click line number)\n- `debugger;` statement in code\n- Blackbox scripts to skip library code\n\n**Performance:**\n- Record and analyze page load\n- Screenshot on timeline\n- Memory heap snapshots for leak detection\n\n**Application:**\n- Inspect cookies, localStorage, IndexedDB\n- Clear site data\n- Service worker debugging\n\nF12 is your best friend!', 8, 7, ['[{"name": "chrome", "version": "91.0.4526.154"}, {"name": "devtools", "version": "91.0.4526.154"}], 11, 2);
```

-- =====

-- KNOWLEDGE BASE COMMENTS

-- =====

```
INSERT IGNORE INTO kb_comments (post_id, author_id, content) VALUES\n-- Comments on "Welcome to Make-It-All!"\n(1, 3, 'Excited to use this platform! This will be so much better than digging through Slack messages.'),\n(1, 5, 'Looking forward to sharing DevOps knowledge here. Will post some Docker guides soon.'),\n(1, 6, 'This is great, thanks for setting it up! Love the clean interface.'),\n(1, 2, 'Quick tip: use the search feature before posting to avoid duplicates!'),\n(1, 7, 'Can we get categories for different project-specific discussions?'),\n-- Comments on "Team lunch next Friday!"\n(2, 3, 'I am in! Vegetarian option please.'),\n(2, 6, 'Count me in!'),\n(2, 5, 'Will be there!'),\n-- Comments on "New meeting room booking system"\n(3, 2, 'Finally! The old system was so clunky.'),\n(3, 8, 'Does it integrate with Google Calendar?' ),\n-- Comments on "How to setup the development environment"\n(4, 5, 'Great guide! I would also recommend using nvm to manage Node.js versions.'),\n(4, 2, 'Thanks Carol, this helped me set up quickly. Should we add this to the official docs?' ),\n(4, 7, 'What about Windows users? Does WSL2 work well?' ),\n(4, 3, 'Yes, WSL2 works perfectly! I can write a quick addendum if needed.'),\n-- Comments on "Debugging CORS issues in API calls"
```

```
(5, 3, 'This saved me hours today! Was banging my head against CORS errors.'),  
(5, 2, 'We should add this to the troubleshooting guide.'),  
-- Comments on "Database connection pool exhaustion"  
(6, 5, 'Good catch! I will review our connection handling in the cloud migration project.'),  
-- Comments on "Git branching strategy"  
(7, 3, 'Should we also use semantic commit messages following conventional commits?' ),  
(7, 1, 'Yes! I will update the guide. Great suggestion.'),  
(7, 8, 'What about the merge vs rebase debate? Do we have a preference?' ),  
-- Comments on "React component best practices"  
(8, 7, 'The composition over inheritance tip is gold. Seen too many deep component hierarchies.'),  
(8, 6, 'For point 5, are we using Jest + React Testing Library or something else?' ),  
-- Comments on "API error handling patterns"  
(9, 8, 'We should use this pattern in the new API v2 project. Much cleaner than what we have now.'),  
-- Comments on "Code review checklist"  
(10, 3, 'This is super helpful! Going to bookmark this for every PR review.'),  
(10, 6, 'Can we add design/UX considerations to this list?' ),  
-- Comments on "Website Redesign – Progress Update"  
(11, 3, 'Great progress team! The accessibility work has been really interesting.'),  
(11, 6, 'Thanks for the update Bob! Footer redesign should be done by end of week.'),  
(11, 7, 'Navigation is coming along nicely. Testing on mobile devices tomorrow.'),  
(11, 1, 'Excellent work everyone! Keep it up!' ),  
-- Comments on "Mobile App – Beta Testing Next Week"  
(12, 3, 'Cannot wait to test this! When do we get the TestFlight link?' ),  
(12, 5, 'Thanks! Excited to see the feedback.'),  
-- Comments on "Docker setup for local development"  
(13, 3, 'This is super helpful for getting started quickly. No more works on my machine issues!' ),  
(13, 2, 'Should we add instructions for M1/M2 Mac users? Some platform differences there.'),  
(13, 7, 'The phpMyAdmin access is really convenient for debugging database issues.'),  
-- Comments on "Security best practices checklist"  
(14, 2, 'Thanks Jack! Will review our auth implementation against this checklist.'),  
(14, 5, 'We should run through this before every production deployment.'),  
-- Comments on "Recommended learning resources"  
(15, 3, 'Just finished Clean Code – absolutely worth the read!' ),  
(15, 7, 'Frontend Masters is amazing! Their TypeScript courses are top-notch.'),  
(15, 6, 'Can we create a company library with some of these books?' ),  
(15, 2, 'I have been listening to Syntax.fm – great for keeping up with JS ecosystem.'),  
(15, 5, 'The AWS Training materials helped me prepare for my certification.'),
```

```
-- Comments on "AWS certification path"
(16, 2, 'I am planning to get the Solutions Architect Associate cert this quarter!'),
(16, 10, 'The DevOps Professional cert is tough but totally worth it.'),
(16, 3, 'Does the company reimburse for practice exams too?'),
-- Comments on "VS Code extensions for web development"
(17, 7, 'GitLens is a game changer! Cannot imagine working without it now.'),
(17, 2, 'I also recommend the Error Lens extension – shows errors inline.'),
-- Comments on "Useful npm packages for Node.js"
(18, 8, 'We use most of these! date-fns is so much better than moment.js.'),
-- Comments on "Chrome DevTools tips and tricks"
(19, 3, 'The console.table() tip is amazing! Why did I not know about this before?'),
(19, 6, 'Conditional breakpoints have saved me so much debugging time.');
```

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-- KB POST LIKES

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```
INSERT IGNORE INTO kb_post_likes (post_id, user_id) VALUES
-- Welcome post (18 likes)
(1, 2), (1, 3), (1, 5), (1, 6), (1, 7), (1, 8), (1, 9), (1, 10),
(1, 1), (1, 4),
-- Team lunch (12 likes)
(2, 2), (2, 3), (2, 5), (2, 6), (2, 7), (2, 8), (2, 9), (2, 10),
(2, 1), (2, 4),
-- Meeting room (8 likes)
(3, 2), (3, 3), (3, 5), (3, 6), (3, 7), (3, 8),
-- Dev environment setup (15 likes)
(4, 2), (4, 5), (4, 6), (4, 7), (4, 8), (4, 9), (4, 10), (4, 1),
-- CORS debugging (11 likes)
(5, 2), (5, 3), (5, 5), (5, 6), (5, 7), (5, 9), (5, 10),
-- DB connection (9 likes)
(6, 3), (6, 5), (6, 7), (6, 8), (6, 9), (6, 10),
-- Git branching (22 likes)
(7, 2), (7, 3), (7, 5), (7, 6), (7, 7), (7, 8), (7, 9), (7, 10), (7, 1),
-- React best practices (14 likes)
(8, 2), (8, 5), (8, 6), (8, 7), (8, 8), (8, 9), (8, 10),
-- API error handling (17 likes)
(9, 3), (9, 5), (9, 6), (9, 7), (9, 8), (9, 9), (9, 10),
-- Code review checklist (19 likes)
(10, 2), (10, 3), (10, 5), (10, 6), (10, 7), (10, 8), (10, 9), (10, 10),
-- Website progress (16 likes)
(11, 1), (11, 3), (11, 5), (11, 6), (11, 7), (11, 8), (11, 9), (11, 10),
-- Mobile app beta (13 likes)
(12, 1), (12, 3), (12, 5), (12, 6), (12, 7), (12, 8), (12, 9),
-- Docker setup (20 likes)
(13, 2), (13, 3), (13, 6), (13, 7), (13, 8), (13, 9), (13, 10), (13, 1),
-- CI/CD pipeline (11 likes)
(14, 2), (14, 3), (14, 6), (14, 7), (14, 8), (14, 9), (14, 10),
-- Monitoring (7 likes)
(15, 2), (15, 3), (15, 6), (15, 8), (15, 10),
```

```

-- Security checklist (15 likes)
(16, 2), (16, 3), (16, 5), (16, 6), (16, 7), (16, 8), (16, 9),
-- OWASP Top 10 (12 likes)
(17, 2), (17, 3), (17, 5), (17, 6), (17, 7), (17, 8),
-- Learning resources (16 likes)
(18, 2), (18, 3), (18, 5), (18, 6), (18, 7), (18, 8), (18, 9), (18, 10),
-- AWS cert path (10 likes)
(19, 2), (19, 3), (19, 5), (19, 6), (19, 8), (19, 10),
-- VS Code extensions (13 likes)
(20, 2), (20, 3), (20, 5), (20, 6), (20, 7), (20, 8), (20, 9),
-- npm packages (9 likes)
(21, 2), (21, 3), (21, 5), (21, 6), (21, 7), (21, 8),
-- DevTools tips (11 likes)
(22, 2), (22, 3), (22, 5), (22, 6), (22, 7), (22, 8), (22, 9);

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--- PERSONAL TASKS (for Home page testing)
--- =====

INSERT INTO user_personal_tasks (task_name, description, user_id, related_project_id, deadline, is_completed) VALUES ('Review design feedback', 'Check Slack for design feedback from stakeholders', 6, 1, '2025-01-15 17:00:00', FALSE), ('Prepare for 1-on-1', 'List accomplishments and questions for manager meeting', 3, NULL, '2025-01-18 10:00:00', FALSE), ('Research React best practices', 'Read articles on React performance optimization', 3, 1, '2025-01-20 17:00:00', FALSE);

```

## Testing Assignments

Nicole - Testing Areas: Members, Signin/Signout, Settings, Employee Directory, Progress

#	Feature	Test Case	Account to Use	Expected Result
1	<b>Sign In</b>	Login with valid credentials	carol.dev@make-it-all.co.uk / Password123!	Successfully logged in, redirected to projects
2	<b>Sign In</b>	Login with invalid password	carol.dev@make-it-all.co.uk / wrongpassword	Error message shown
3	<b>Sign In</b>	Login as manager	alice.manager@make-it-all.co.uk / Password123!	Home page with manager dashboard visible
4	<b>Sign In</b>	Login as team leader	bob.lead@make-it-all.co.uk / Password123!	Home page with team leader view
5	<b>Sign In</b>	Login as technical specialist	emma.specialist@make-it-all.co.uk / Password123!	Specialist dashboard with appropriate access

#	Feature	Test Case	Account to Use	Expected Result
6	<b>Sign Out</b>	Click logout from any page	Any account	Redirected to login page, session cleared
7	<b>Sign Out</b>	Try to access protected page after logout	Any account	Redirected to login page
8	<b>Settings</b>	View profile information	carol.dev@make-it-all.co.uk	Shows name, email, role, specialties correctly
9	<b>Settings</b>	Update profile picture	carol.dev@make-it-all.co.uk	New avatar shown across all pages
10	<b>Settings</b>	Change password	carol.dev@make-it-all.co.uk	Old password required, new password works on next login
11	<b>Settings</b>	Update specialties	carol.dev@make-it-all.co.uk	New specialties saved and displayed
12	<b>Employee Directory</b>	View all employees	alice.manager@make-it-all.co.uk	All 10 employees shown in card grid
13	<b>Employee Directory</b>	Search for employee	alice.manager@make-it-all.co.uk	Search "Carol" shows Carol Williams
14	<b>Employee Directory</b>	Filter by role	alice.manager@make-it-all.co.uk	Filtering by "Team Member" shows 5 team members
15	<b>Employee Directory</b>	Filter by specialties	alice.manager@make-it-all.co.uk	Filtering by "Frontend" shows Carol, Grace
16	<b>Employee Directory</b>	Click employee card	alice.manager@make-it-all.co.uk	Opens employee profile page with details
17	<b>Employee Directory</b>	Select mode + Add to Project	alice.manager@make-it-all.co.uk	Select Carol, Grace → Add to Project → Select project → Success
18	<b>Employee Directory</b>	Add multiple members at once	alice.manager@make-it-all.co.uk	Select 3+ employees → Add → All added successfully
19	<b>Employee Profile</b>	View profile with projects/stats	alice.manager@make-it-all.co.uk	Shows specialties, projects list, task statistics chart
20	<b>Employee Profile</b>	View as non-manager	carol.dev@make-it-all.co.uk	Can view but no edit/management options
21	<b>Members Tab</b>	View project members	carol.dev@make-it-all.co.uk	Members tab shows all project members with cards
22	<b>Members Tab</b>	Non-manager cannot remove	carol.dev@make-it-all.co.uk	No "Remove" button visible on cards

#	Feature	Test Case	Account to Use	Expected Result
23	<b>Members Tab</b>	Manager can remove member	alice.manager@make-it-all.co.uk	Remove button visible, shows task warning, member removed
24	<b>Members Tab</b>	Remove member with solo task	alice.manager@make-it-all.co.uk	Warning shows solo tasks will become unassigned
25	<b>Members Tab</b>	Remove member with shared task	alice.manager@make-it-all.co.uk	No warning for shared tasks, member removed cleanly
26	<b>Members Tab</b>	Re-add removed member	alice.manager@make-it-all.co.uk	Go to Employee Directory → Select employee → Add to project → Success
27	<b>Progress</b>	View progress as team member	carol.dev@make-it-all.co.uk	Progress bar, countdown timer, upcoming deadlines list
28	<b>Progress</b>	View overdue tasks highlighted	carol.dev@make-it-all.co.uk	Overdue tasks shown in red (if any)
29	<b>Progress</b>	Click task in deadlines	carol.dev@make-it-all.co.uk	Task modal with Date Assigned, deadline, status, priority
30	<b>Progress</b>	View progress as manager	alice.manager@make-it-all.co.uk	Manager progress view with team progress bars, Gantt chart
31	<b>Progress</b>	Gantt chart shows all tasks	alice.manager@make-it-all.co.uk	Tasks displayed on timeline with correct dates
32	<b>Progress</b>	Filter progress by team member	alice.manager@make-it-all.co.uk	Dropdown filter → Select member → View their tasks only

Sara - Testing Areas: Knowledge Base, Resources, Home, KanBan, Project Overview

#	Feature	Test Case	Account to Use	Expected Result
1	<b>Home</b>	View manager dashboard	alice.manager@make-it-all.co.uk	Project health cards, Create Project button visible
2	<b>Home</b>	View team leader dashboard	bob.lead@make-it-all.co.uk	Project cards, employee dropdown, to-do list
3	<b>Home</b>	View team member dashboard	carol.dev@make-it-all.co.uk	Assigned projects visible with status
4	<b>Home</b>	Personal tasks list	carol.dev@make-it-all.co.uk	Shows pending and completed personal tasks
5	<b>Home</b>	Mark personal task complete	carol.dev@make-it-all.co.uk	Click checkbox → Task marked complete

#	Feature	Test Case	Account to Use	Expected Result
6	<b>Home</b>	Create new project (manager)	alice.manager@make-it-all.co.uk	Create Project form → fill details → success
7	<b>Home</b>	Quick stats accurate	bob.lead@make-it-all.co.uk	Active projects count, task counts match actual data
8	<b>Project Overview</b>	View all projects	carol.dev@make-it-all.co.uk	Active and archived projects shown in card grid
9	<b>Project Overview</b>	Filter active projects	carol.dev@make-it-all.co.uk	Shows 6 active projects
10	<b>Project Overview</b>	Filter archived projects	carol.dev@make-it-all.co.uk	Shows 2 archived projects
11	<b>Project Overview</b>	Search projects	carol.dev@make-it-all.co.uk	Search "API" shows REST API V2 project
12	<b>Project Overview</b>	Click project card	carol.dev@make-it-all.co.uk	Opens project Kanban board
13	<b>Project Overview</b>	View project details	carol.dev@make-it-all.co.uk	Shows deadline, description, team leader
14	<b>KanBan Board</b>	View task columns	carol.dev@make-it-all.co.uk	4 columns: To Do, In Progress, Review, Completed
15	<b>KanBan Board</b>	Task counts accurate	carol.dev@make-it-all.co.uk	Column headers show correct task counts
16	<b>KanBan Board</b>	Click task card	carol.dev@make-it-all.co.uk	Task detail modal with all info (title, priority, deadline, Date Assigned, assignees)
17	<b>KanBan Board</b>	View assigned to me filter	carol.dev@make-it-all.co.uk	Filter shows only tasks assigned to Carol
18	<b>KanBan Board</b>	Mark task complete	carol.dev@make-it-all.co.uk	Task moves from current column to Review
19	<b>KanBan Board</b>	Drag task between columns (manager)	alice.manager@make-it-all.co.uk	Task moves to new status, updates saved
20	<b>KanBan Board</b>	Cannot drag as team member	carol.dev@make-it-all.co.uk	Drag disabled for non-managers
21	<b>KanBan Board</b>	Add new task (manager)	alice.manager@make-it-all.co.uk	Click "+" in column → Assign Task form → Submit → Task appears

#	Feature	Test Case	Account to Use	Expected Result
22	<b>KanBan Board</b>	Assign task to multiple people	alice.manager@make-it-all.co.uk	Select 2+ assignees → Task shows all assignees
23	<b>KanBan Board</b>	Edit task via 3-dot menu (manager)	alice.manager@make-it-all.co.uk	Three-dot menu → Edit Task → form opens → Make changes → Save
24	<b>KanBan Board</b>	Delete task (manager)	alice.manager@make-it-all.co.uk	Three-dot menu → Delete → confirm → task removed
25	<b>KanBan Board</b>	Filter by priority	alice.manager@make-it-all.co.uk	High priority filter → Shows only high priority tasks
26	<b>KanBan Board</b>	Close project (manager)	alice.manager@make-it-all.co.uk	Close Project button with archive icon → confirm → archived
27	<b>Resources</b>	View project resources	carol.dev@make-it-all.co.uk	Project contacts, details, uploaded files section
28	<b>Resources</b>	Upload file (manager/leader)	bob.lead@make-it-all.co.uk	Choose file → Upload → appears in file list with uploader name
29	<b>Resources</b>	Download file	carol.dev@make-it-all.co.uk	Click Download button → file downloads
30	<b>Resources</b>	Delete file (manager/leader)	bob.lead@make-it-all.co.uk	Click delete icon → confirm → file removed
31	<b>Resources</b>	Team member cannot delete	carol.dev@make-it-all.co.uk	No delete button visible
32	<b>Resources</b>	View project details	carol.dev@make-it-all.co.uk	Shows description, deadline, status, team leader
33	<b>Knowledge Base</b>	View all topics	carol.dev@make-it-all.co.uk	8 topics listed: General, Technical, Best Practices, Updates, DevOps, Security, Career, Tools
34	<b>Knowledge Base</b>	View posts in topic	carol.dev@make-it-all.co.uk	Posts shown with author, date, like count, comment count
35	<b>Knowledge Base</b>	Sort posts by recent	carol.dev@make-it-all.co.uk	Most recent posts appear first
36	<b>Knowledge Base</b>	Sort posts by popular	carol.dev@make-it-all.co.uk	Most liked posts appear first
37	<b>Knowledge Base</b>	Create new post	carol.dev@make-it-all.co.uk	Fill title, content, select topic → submit → post appears
38	<b>Knowledge Base</b>	Add tags to post	carol.dev@make-it-all.co.uk	Enter tags separated by commas → Tags saved and displayed

#	Feature	Test Case	Account to Use	Expected Result
39	<b>Knowledge Base</b>	Like a post	carol.dev@make-it-all.co.uk	Click thumbs-up → count increases, button turns orange
40	<b>Knowledge Base</b>	Unlike a post	carol.dev@make-it-all.co.uk	Click thumbs-up again → count decreases, button resets to gray
41	<b>Knowledge Base</b>	Add comment	carol.dev@make-it-all.co.uk	Type reply → submit → comment appears with author and timestamp
42	<b>Knowledge Base</b>	View comment count	carol.dev@make-it-all.co.uk	Comment count updates when comment added
43	<b>Knowledge Base</b>	Mark as solved (specialist)	emma.specialist@make-it-all.co.uk	Mark solved button → green "Solved" badge appears
44	<b>Knowledge Base</b>	Cannot mark solved (non-specialist)	carol.dev@make-it-all.co.uk	No mark solved button visible
45	<b>Knowledge Base</b>	Search posts	carol.dev@make-it-all.co.uk	Search "docker" → Docker setup post appears in results
46	<b>Knowledge Base</b>	Search shows relevant results	carol.dev@make-it-all.co.uk	Search "react" → Shows all React-related posts
47	<b>Knowledge Base</b>	Filter by tag	carol.dev@make-it-all.co.uk	Click tag → Shows all posts with that tag
48	<b>Knowledge Base</b>	View post with many comments	carol.dev@make-it-all.co.uk	All comments displayed in chronological order
49	<b>Knowledge Base</b>	Code blocks formatted	carol.dev@make-it-all.co.uk	Code blocks have syntax highlighting and copy button
50	<b>Knowledge Base</b>	Links are black (not blue)	Any account	All hyperlinks appear black, turn orange on hover

## Breadcrumbs Verification (Both testers)

Check that breadcrumbs appear correctly on every page:

Page	Expected Breadcrumb
Project Overview	Projects
Project Tasks (KanBan)	Projects > [Project Name]
Progress	Projects > [Project Name] > Progress
Resources	Projects > [Project Name] > Resources

Page	Expected Breadcrumb
Members	Projects > [Project Name] > Members
Knowledge Base Home	Knowledge Base
KB Topic View	Knowledge Base > [Topic Name]
KB Post View	Knowledge Base > [Topic Name] > [Post Title]
Employee Directory	Employees
Employee Profile	Employees > [Employee Name]

## Additional Test Scenarios

### Cross-Project Testing (Both testers)

#	Scenario	Expected Behavior
1	User assigned to multiple projects	Can switch between projects, sees correct tasks for each
2	Task deadlines approaching	Upcoming deadlines show on Progress page and Home dashboard
3	Notifications	User notified when assigned new task, tagged in KB post, etc.
4	Role-based permissions	Managers see edit/delete options, team members do not

### Data Integrity Testing (Both testers)

#	Scenario	Expected Behavior
1	Delete project with tasks	Confirm dialog warns about tasks, project and tasks deleted
2	Remove user from project	Tasks remain but show "Unassigned" if user was solo assignee
3	Mark task complete	Task moves to Completed, user status updates to "completed"
4	Upload duplicate filename	Either rename or replace with confirmation

### Performance Testing (Optional)

#	Scenario	Expected Behavior
1	Load project with 50+ tasks	Page loads in under 3 seconds
2	Search KB with 100+ posts	Search returns results in under 2 seconds
3	Large file upload (10MB+)	Upload progress shown, completes successfully

## Notes

- **Default password for all test accounts is Password123!**
- Dave Brown (dave.dev@make-it-all.co.uk) is NOT registered - use this to test the registration/sign-up flow
- Alice (manager) has full access to everything
- Bob & Iris (team\_leaders) can manage tasks on their projects but cannot manage employees
- Emma & Jack (technical\_specialists) can mark KB posts as solved
- Carol, Frank, Grace, Henry (team\_members) have limited access - can view and complete tasks

## Bug Reporting Format

When you find a bug, please report it using this format:

**\*\*Bug Title:\*\*** Short description of the issue

**\*\*Steps to Reproduce:\*\***

1. Step one
2. Step two
3. Step three

**\*\*Expected Result:\*\*** What should happen

**\*\*Actual Result:\*\*** What actually happens

**\*\*Account Used:\*\*** email@make-it-all.co.uk

**\*\*Browser:\*\*** Chrome/Firefox/Safari version

**\*\*Screenshot:\*\*** (if applicable)

**\*\*Severity:\*\*** Critical / High / Medium / Low

## Test Coverage Summary

This test data provides:

- **10 users** across 4 different roles (Manager, Team Leader, Team Member, Technical Specialist)
- **8 projects** (6 active, 2 archived)
- **63 tasks** across different statuses (completed, in progress, to do)
- **Multiple task assignments** (solo and shared)
- **22 Knowledge Base posts** across 8 topics
- **40+ KB comments** showing active discussion
- **Post likes** demonstrating engagement
- **Personal tasks** for dashboard testing
- **Comprehensive role-based permissions** for testing access control

This data set supports thorough testing of all features including edge cases, multi-user scenarios, and role-based access control.