

Zurvan Project - App Idea and Data Model

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1 App Concept: Time-Log Based Task Manager

1.1 Vision

Zurvan is a productivity-focused task management system that centers around **time logging** as the core mechanism for tracking work and measuring productivity. The application enables teams and individuals to log time spent on specific tasks, providing valuable insights for both personal productivity improvement and employer-based incentive systems.

1.2 Key Features

1.2.1 Time Tracking at the Core

- Users log time when starting and stopping work on specific tasks
- Real-time tracking with start/stop functionality
- Manual time entry for offline work or corrections
- Time session history and detailed breakdowns

1.2.2 Productivity Analytics

- **Personal Dashboards:** Individual productivity metrics, time distribution across projects/tasks
- **Team Analytics:** Compare team member productivity, identify bottlenecks
- **Project Insights:** Track time investment per project, estimate completion times
- **Trend Analysis:** Weekly/monthly productivity patterns and improvements

1.2.3 Incentive Integration

- **Performance-Based Rewards:** Employers can set up incentive systems based on logged hours
- **Productivity Bonuses:** Reward consistent time logging and task completion
- **Goal Achievement:** Set time-based targets with reward mechanisms
- **Transparency:** Clear metrics for both employees and employers

1.3 Value Proposition

- **Table:** users
- **Purpose:** Authentication and user management
- **Key Fields:**
 - **id:** Primary key
 - **name:** User's display name
 - **email:** Unique email address for login
 - **password:** Hashed password
 - **email_verified_at:** Email verification timestamp
- **Relationships:**
 - Has many projects (as owner)
 - Has many projects (as assignee)
 - Has many tasks (as owner)
 - Has many tasks (as assignee)
- **Methods:** `initials()` - generates user initials from name

1.4 2. Project Model

- **Table:** projects
- **Purpose:** Project management and organization
- **Key Fields:**
 - **id:** Primary key
 - **owner_id:** Foreign key to users table
 - **assignee_id:** Foreign key to users table (nullable)
 - **deadline:** Project deadline (nullable)
 - **status:** Current project status
- **Relationships:**
 - Belongs to User (owner)
 - Belongs to User (assignee)
 - Has many tasks

1.5 3. Task Model

- **Table:** tasks
- **Purpose:** Individual task management within projects
- **Key Fields:**
 - `id`: Primary key
 - `project_id`: Foreign key to projects table (nullable)
 - `owner_id`: Foreign key to users table
 - `assignee_id`: Foreign key to users table (nullable)
 - `deadline`: Task deadline (nullable)
 - `status`: Current task status
- **Relationships:**
 - Belongs to Project
 - Belongs to User (owner)
 - Belongs to User (assignee)
- **Fillable:** `project_id`, `owner_id`, `assignee_id`, `deadline`, `status`

Note: The `project_id` is nullable to accommodate existing tasks that weren't initially associated with projects.

