

Design Doc: Leisure Moment

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Github: <https://github.com/mingxinwb/leisure-moment>

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Status: draft

Overview

Major Use Cases

High-level Stack Diagram

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Navbar

New Leisure Moment

Leisure Moment List

Leisure Moment Detail

UI Design

Components Views and Models

Home Page

Component: New Leisure Monent

Component: Leisure Monent List

Nickname Wrapper

Leisure Monent Detail Page

Component: Leisure Monent Detail

Component: Conversation Panel

App page

Component: NavBar

REST API Process

Socket IO Communication

Socket.io at Client-side

Socket.io at Server-side

Scalability (TBD)

Test Plan (TBD)

Launch Plan (TBD)

Future Work (TBD)

Reference (TBD)

Overview

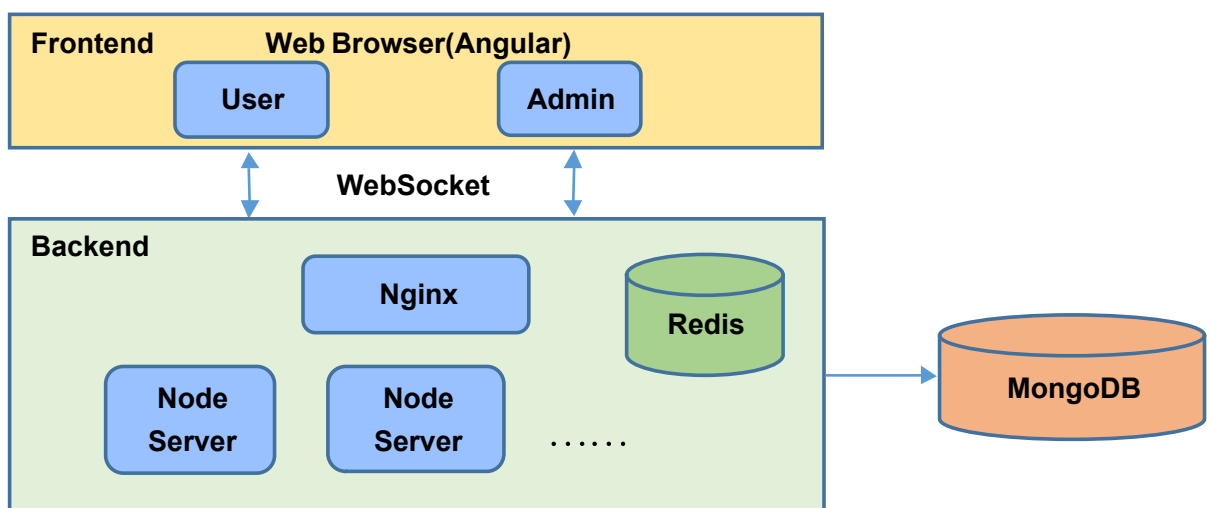
Leisure is a full-stack system supporting a real-time conversation room for each leisurely moment. This document covers the details of the implementation of Leisure Moment Submit and Real-time Conversation from an engineering perspective.

Major Use Cases

1. When entering Leisure, user is supposed to enter a nickname.
2. User can submit new leisure moment. Supported type are text, image and video/audio.
3. User can click one of the leisure moment from the leisure moment list and join its real-time conversation room.
4. User can chat with others through the conversation panel, they can send their comments with unique color, emojis and images to the conversation panel.
5. User can press the heart button as like for any leisure moments.
6. User can browse pre-stored leisure moment list and they can also see the number of likes and comments on each leisure moment.
7. User's chat history will be recorded for reference.
8. Admin can manually manage their account: add a unique icon, manage their posts (CRED) and browse the notification of who likes/comments your leisure moment. They can also press the favorite button for any leisure moments and browse their favorites history later.

High-level Stack Diagram

Stack	Technologies
Frontend - client	Angular.js, Socket.io
Backend - server	Node.js, Socket.io, Redis, MongoDB, Nginx



Detailed Design

Modules

Navbar

- Brand Name
- Nickname
- Sign up/Sign in
- Account (dropdown list - only for Admin)
 - Icon
 - Your leisure moments
 - Notification (likes/comments)
 - Favorites

New Leisure Moment

- Nickname
- Leisure Moment Title
- Texts, Images, or Video/Audio
- Location (TBC)

Leisure Moment List

For each leisure moment:

- Nickname
- Location (TBC)
- Leisure Moment Title with Conversation Room Link
- Number of Likes with Heart Icon
- Number of Comments with "Comment (for one) / Comments"

Leisure Moment Detail

- Nickname
- Location (TBC)
- Leisure Moment Title
- Leisure Moment Content
- Heart Icon Button as Like
- Comments Count Status
- Conversation Panel
 - Online Count Status
 - Conversation History
 - Button of Color, Emoji and Image
 - Send Comment Area
 - Send Button

UI Design (picture TBC)

Components Views and Models

Home Page

- Component: New Leisure Monent
 - View
 - Model
- Component: Leisure Monent List
 - View
 - Model
- Nickname Wrapper can be written into home page html

Leisure Monent Detail Page

- Component: Leisure Monent Detail
 - View
 - Model
- Component: Conversation Panel
 - View
 - Model

App page

- Component: NavBar
 - View
 - Model

REST API Process (picture TBC)

Socket IO Communication (picture TBC)

Socket.io at Client-side

Method	Description

Socket.io at Server-side

Method	Description
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Scalability (TBD)

Test Plan (TBD)

Launch Plan (TBD)

Future Work (TBD)

Reference (TBD)