SATELLID: PERSONAL KNOWLEDGE MANAGER

with Web Technologies

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OUTLINE

Introduction: Background, Objective, Scope

Literature Study: KMS, SDLC, Design Pattern, Database, Programming, Platform, Framework, Soft. Testing, SCM

Analysis & Design: Target User, User Types, User Stories, Contextual
System, Functionality Flow, App Architecture, User
Interface & Interaction

Implementation & Testing : Agile Development, Code, and Test Conclusion & Suggestion

INTRODUCTION

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Background

Solve a problem around *daily knowledge management*. Need for tool and system to make it more effective.

Objective

Defining and proposing the solution of managing daily knowledge or information for personal users in casual way, called "Satellid knowledge manager" to met the solution.

Scope

Create a *simpler system* to do daily knowledge management for personal use with basic BROWSE, READ, EDIT, ADD, DELETE (BREAD) features.

How to manage tons of personal knowledge we have with just a simple system of knowledge manager?

LITERATURE STUDY

LITERATURE STUDY (1)

Knowledge Management System

Data-Information-Knoweldge-Wisdom (DIKW), Knowledge Management System (KMS), Personal Knowledge Manager

Software Development Life Cycle

Agile methodologies, Minimum Viable Product (MVP), unit testing

LITERATURE STUDY (2)

Design Pattern

BROWSE, READ, EDIT, ADD, DELETE (BREAD), simple interaction and interface design with mockup

Database

NoSQL, document database, MongoDB

Programming

JavaScript, JSON, Node.js, web application, framework, full stack framework called Meteor, source code management (SCM) with Git

ANALYSIS & DESIGN

ANALYSIS (1)

Target user: (image)

User Types: (image)

ANALYSIS (2)

Agile User Stories

- As a System, I need to be run on supported platform and via a network
- 2. As a System, I can have the data imported without the app opened
- 3. As a User, I want to use the app via web browser
- 4. As a User, I want to read knowledge that already stored
- 5. As a User, I want to search a knowledge and view the search result
- 6. As a User, I want to add a new knowledge based on context
- 7. As a User, I want to delete a stored knowledge
- 8. As a User, I want to edit a stored knowledge

DESIGN (1)

Contextual System (image)

DESIGN (2)

Functionality Flow (image)

DESIGN (3)

Application Architecture (image)

DESIGN (4)

User Interface and Interaction (image)

IMPLEMENTATION & TESTING

IMPLEMENTATION (1)

```
Snippets of Server Code
    var snippets = "code";
Snippets of Client Code
    var snippets = "code";
```

IMPLEMENTATION (2)

[Application Screenshot]

TESTING

[Unit Testing Screenshot]

CLOSING

CONCLUSION

- 1. Simple system of managing tons of personal knowledge
- 2. Flexible data schema combined with template
- 3. Template based on context
- 4. Implementation with Web technologies

SUGGESTION & FUTURE WORK

There could be some inadequacy, so further and iterated improvement will remain to be done continuously

Feature Roadmap:

Account system, easy import & export, more predefined context and field, BREAD the template, more custom configuration, multimedia support, integration with other networks, encryption, etc

