Human Computer Interaction Study Case: Voice Controlled Task Management Web App Tool

Done by :-
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Supervisor :XXXXXX

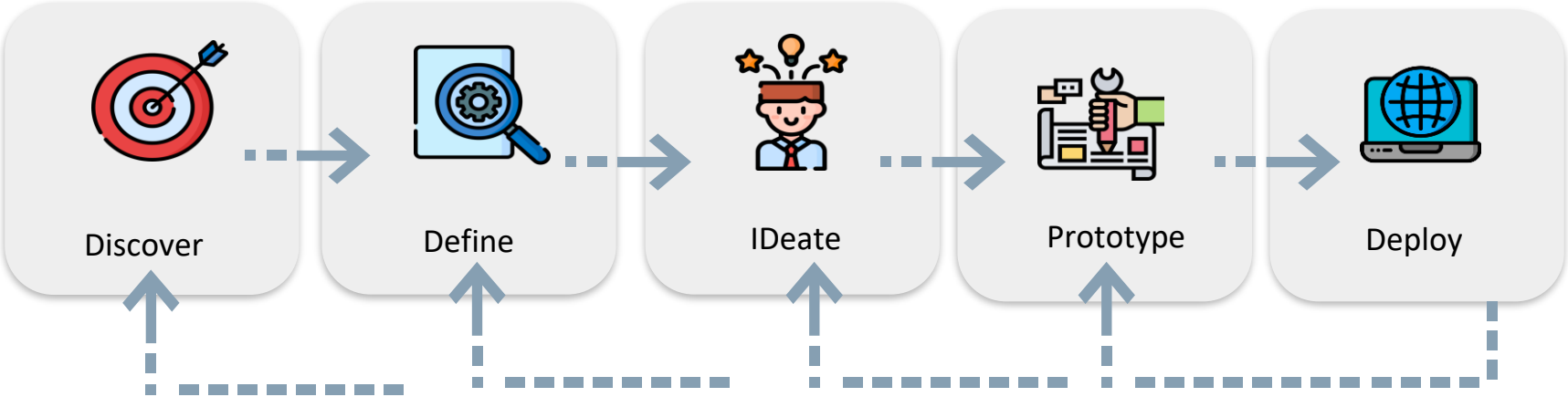
TABLE OF CONTENTS

01

Design Thinking Process

How to approach problems creatively

01-Design Thinking Process



01.01

Discover stage

Find User Problems

Interviews

Interviewees :

Group Interview of 8 people of users/not users of TMA

Questions :

1. Do you write a todo list daily ?
2. How often do you use TMA?
3. Do you accomplish all tasks written in the list?

Analysis of answers :

1. Actual users do not have motivation to use it
2. Non-users do not use it efficiently

01.02

Define stage

Define requirements/ Goals of the design

Main Strategy of the Design

- **Attract User and Non-Users of Time Management Apps**
- **Simple and one-click Design**
- **Keep in mind all types Users**

01.03

Ideate stage

Flare and Focus Method

Final Applied Ideas

01

Use Voice Recognition to Control the App

02

Minimalist & Modern Design

03

Screen Reader Features

04

Make it Web App: accessible from all devices

01.04

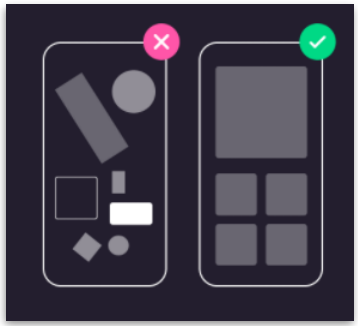
Design & Prototype stage

Using Latest Technologies

Designing a Prototype

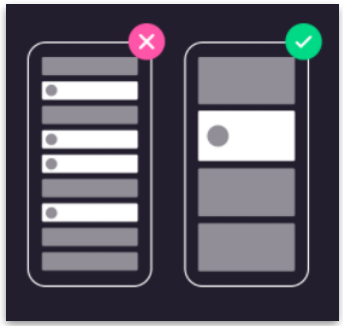
Design Tool

Design Theories



Aesthetic-Usability Effect

Fitts's Law



Hicks Law

High Fidelity MOCKUPS

Adobe XD Design

Responsive Design for all types of Digital Devices regardless of Operating system or screen size or compatibility

01.05

Test stage

UX and Functionality Testing

Types of Tests Conducted

Usability

Tested by 10 different People

Responsiveness

Viewed from 4 different devices

Voice Recognition

Tested by 4 different People

Accessibility

Using web-based screen reader

Functionality

Individual & combinations of functionality tested

Deployment

Test if all previous test work on the deployed model

03

Development & Deployment

Voice Recognition Using TF model

01 Click on the speak button

02 Mic capture the command

03 Tensorflow model outputs“words”

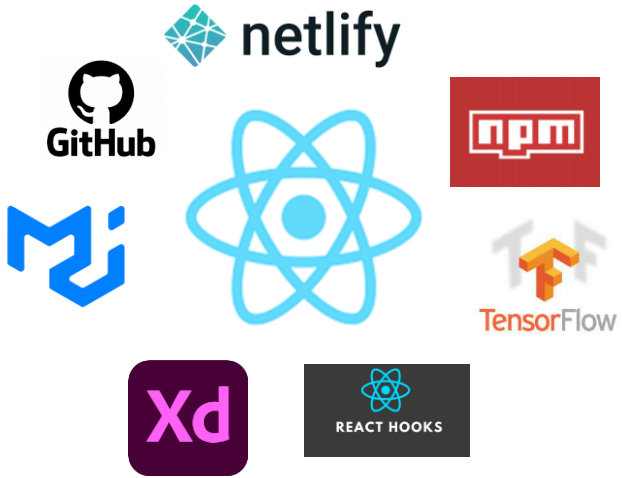
04 Use REACt Hooks to control Webpage

List of Used Libraries & Tools

AI Model

Tensorflow Speech Recognition Model

Backend & Frontend development



03

Live Demo 

04

Conclusion and future work

What The Future Holds

User Centered

Generate unique features based on users demands

Integrate

Integrate with other App for seamless transition and quicker access

Stylus Experience

Add stylus experience and its related features

THANKS!

Do you have any questions?