Wallpaper Workshop

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     Ketchup

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Part 0
JavaScript with Electron and Windows

Synopsis
Every computer user has demand of setting a wallpaper for the desktop. However, searching suitable pictures is time consuming. And for those who like to design and create wallpapers, a sharing platform is needed. Wallpaper Workshop is a software where users can upload their own wallpapers, browse others' works, search wallpapers on the Internet, download wallpapers and set as desktop picture. Also, for those who want to periodically change wallpapers, it provides customized setting options.

Technologies
- Development Framework:
    - Electron
    - Mongoose
    - Node.js
- Database:
    - MongoDB
- Tools:
    - AWS
- Build tools:
    - npm

User Story
1. As a user who want to use the Wallpaper Workshop, I want to be able to login to the application, so that I can have a full access to all functionalities. My conditions of satisfaction is my username and password is required during login in order to verify my identification.
2. As a user, I want to collect the amazing wallpaper in the Wallpaper Workshop, so that I can have a persistent personal list for all my wallpaper collections in my account. My condition of satisfaction is when I use my account to login at somewhere else, like my

another laptop, I can have a access to my collection of wallpaper and set the new wallpaper easily.

3. As a user who want to change the wallpaper but do not have specific interests and aims, I want to browse the recent popular wallpapers, so that it can give me some ideas and help me make the decision. My conditions of satisfaction is having a access to the high-quality wallpapers, which are ranked by the recommandations and usage from other users in the workshop community, within one specific topic or the general "most popular" topic.

4. As a wallpaper designer/creator, I want to share my works with others, so that others can use my wallpapers. My conditions of satisfaction is that I can upload my works and they can be viewed, liked, collected/downloaded by others.

5. As a fan of pets, I want different lovely pets pictures to be my computer wallpaper so that I won't be boring when I sit in front of the computer. My condition of satisfaction is that I can search for my favourite pets through this app and get its pictures back.

6. As a person who often uses PC to work and entertain, I want to change my wallpaper automatically everyday so that I can save time. My conditions of satisfaction is I can set the frequency of wallpaper changes and the range of the wallpapers that I want to change, such as choosing some specific wallpapers from my collection or randomly choose wallpapers from one or more categories.

7. As a user, I want to 'Like' the wallpapers that I love, so that it can appear in the recommendation session and be viewed by more users in order to encourage the designer. My condition of satisfaction is that I can give a 'Like' to the wallpapers.

Test case

1.
Title: Login Page- Authenticate Successfully
Description: A registered user should be able to successfully login the application.
Precondition: the user must have already registered with username and password.
Test Steps:
     1.Enter username and password
     2. Click "Login" button
Expected Result: User information and collections displays at the sidebar. If password does not match with the username, an error page occurs and require users to re-enter.

2.
Title: Collection Page- Load user's collection successfully
Description: After login to the software on no matter which computer, a user could see all his collections and set the new wallpaper.
Precondition: the user must have already registered and have wallpapers collected.
Test Steps:
     1. Login using username and password
     2. Go to the collection page
     3. Choose one wallpaper and click the "set desktop picture" button

Expected Result: All wallpapers the user collected are shown, and the chosen one will be set as the screen.

3.
Title: Main Page - Browse for recommended wallpapers
Description: A registered user should be able to browse the recommended wallpapers on the main page.
Precondition: Open the Application.
Assumption: the application runs properly on user's computer.
Test Steps:
      1. Get into the Main Page of the application
      2. See the recommended wallpaper listed under the "Most Popular" column
Expected Result: The Main Page shows the recommended wallpaper under the "Most Popular" column properly

4.
Title: Main Page - Upload self-created wallpapers
Description: A registered user should be able to upload self-created wallpapers on the main page.
Precondition: the user must already be registered with an email and password, and the user must be logged in to the application.
Assumption: the application runs properly on user's computer.
Test Steps:
      1. Get into the Main Page of the application
      2. Click the "Upload" button
      3. Select the image you want to upload in the popped out selection window
      4. Click the "Confirm" button in the selection window
Expected Result: The uploaded wallpapers can be accessed in the application by all users and shows properly.

5.
Title: Search
Description: the user gives a keyword, and he/she will see the specific wallpapers in the app
Test Steps:
      1. open the app
      2. enter keywords in the search box
      3. click search button
Expected Result: If we can find wallpapers in the wallpaper website, we will see the wallpapers on the app; If not, we will see a err "fail to find the wallpapers"

6.
Title: Setting
Description: the user can choose the frequency of changing wallpapers automatically, and the collection of wallpapers to change.

Test Steps:
1. Navigate to setting page
2. Click 'automatically change wallpaper' button
3. Select the wallpapers you want to add into the 'changing' collection
4. Set the frequency you want

Expected Result: The wallpapers of PC will automatically change with expected frequency and pictures.

7.

Title: Give likes to wallpaper

Description: A user should be able to give likes to wallpapers which showed in the gallery.

Precondition: The gallery should already have at least one wallpaper.

Assumption: The feedback system from users to database to be completed.

Test Steps:
1. Navigate to gallery.
2. Click the one of the tags.
3. Click like below one of the wallpapers

Expected Result: Likes below the wallpaper will + 1