**UI Description for the users**

1. User comes to our company website and on the corner goes for login
2. Now a new user,

User Registration Process

Customer contacts HD Emcon through website or through offline measures.

HD Emcon processes the order offline and once the order is processed, rights have to be assigned through the HD Emcon Admin Panel.  
The user gets an email confirming the registration and the account is now active. The user can then add custom logos or company details or users or devices as desired.

Till the user is not active, the user cant login to the system.

There will be a demo user login in the website where he can view the only certain details of the software

1. Login Screen

This will be very first screen of the admin panel. This should have following elements

* Logo
* User ID
* Password
* Submit/Login Button
* Forgot Password / User ID

1. Login Error page on incorrect Login (User ID or password)
2. Forget Password recovery page
   1. User to enter the email ID
   2. OTP to be sent on the Email ID provided with a link
   3. User to use the link to login and has to change the password immediately.
3. User Types
   1. Company Admin – The person incharge of handling the software, can edit details about the organization like logo, address etc, can add department admins or add users or add devices. Has access to all the functionality of the software
   2. Department admins – The person incharge of a particular department. Can add devices or users only to that particular department. Can view data only for that department.
   3. User Roles:
      1. Creator : The person who creates the reports. Sign or initials added at the bottom of the page for the creator
      2. Reviewer: The person who reviews the reports. Sign or initials added at the bottom of the page for the reviewer
      3. Auditor: The person who audits the reports. Sign or initials added at the bottom of the page for the auditor
4. On successful login open the Main Dashboard page

This will have below elements on page

Main Owner Logo (as of now this will be at Top right)

* Welcome User Name Text (Top Left)
* Logout Text beside Welcome User Text (Top Left)
* Brand Logo (Customer or Organsiation Logo)
* Page Title e.g. Dashboard - beside Brand logo
* Each Device will be shown in a box with the following details
  + Sr. No
  + Location
  + Status (Online or Offline)
  + WiFi / Ethernet symbols
  + Values of parameters along with relevant symbols and Alarm indications
  + At the bottom, show "Last Updated on  .... "
* Footer will have just blue band and copyright text.

On clicking the device, it will open up a new page. It should have details of device, option to edit, table with all parameter values (if there is alarm it should be marked in a seperate colour), graphs of all the parameters of the device (by default shows all parameters and then user can select what all he wants to see)

1. Floor Display
   1. User should be able to upload multiple image / floor plan depending on the department and location.
   2. The floor plan then shows up along with a list of the sensors. The user can now drag and drop the sensors onto the map to show location.
   3. The sensors will have a green color dot if within alarms limits and red color if in alarm conditions.
   4. If the mouse over happens, that it will show the current values of the sensor.
2. Top Menu For All Pages

Below will be top menu for all pages

* Dashboard (This will have no submenu)
* Manage Organizations (Only for Admins )
  + Edit Organization (Only for Company Admin)
  + Add Users
  + View Users
* Manage Devices
  + View Devices
  + Add New Device (only for admins)
* Reports
  + By Devices
  + By Parameters
* User Log
* User notifications (alarms events, new user addition (for admin only))

1. Add User Page (Admin only)

Process:

* The company Admin adds a new user by putting the users name and email address. He will also assign rights to the user along with Creator/reviewer or auditor states.
* The user gets an email that registration is requested and he adds in the other details required.
* Once the user completes the process the user gets added and admin gets the notification.
* Admin has rights to change any users details excluding the password.
  1. Page Title
  2. This page will have form with following fields
     1. Name
     2. Location
     3. Phone Number
     4. Email Address
     5. Employee ID
     6. Department
     7. Company
     8. User ID
     9. Password
     10. Creator/Reviewer or Auditor
     11. Shift Timings with alert timings
     12. User Status (Active/ Inactive) – Radio Button
     13. Rights Section with following tick marks (Only visible to the admin)
         1. Generate Reports (Tick Box)
         2. Alarm Email Notification (Tick Box)
         3. Add / Edit / Delete Device (Tick Box)
     14. View User Activity Log (Only visible to the admin)

1. View Users List Page
   1. This page will have list of users in table form – clicking on name of user will take edit user page
   2. Page Title
   3. Table will have column like Name, Email ID, Status, User ID, Rights in bullets
   4. Search Box
2. Device Addition Process (Only doen by admin)
   * + 1. Super Admin (Admin from the HD Emcon company and not the customers company) will add lot of devices in the system to sale by generating Serial No. Serial numbers generated will be stored in the system
       2. The user from ABC organization registers on the website and makes an account onto the system through the website. He enters details of his organization, email id etc.
       3. Super Admin will sell devices to Organisation ABC in real world offline.
       4. Super Admin after completing the sale, will then activate the corresponding companys user account.
       5. Super Admin then assign that sold out device to Organisation ABC in the system.
       6. At the time of adding organisation ABC in the system Registration confirmation email will be sent to Newly Added Organisation ABC’s main email id.
       7. Registered Organisation ABC will come to website and login in to system
       8. At the time of device purchase – Each device will have serial no mentioned on the device hardware
       9. Registered Organisation ABC will have main admin user provided by Super Admin. Default login user id and password provided by Super Admin will be main Company admin User Id and Password for Organisation ABC
       10. After login to the system admin of the organisation will complete their profile by uploading logo and other details of the organisation.
       11. Admin of the organisation will then take physical device and add the serial numbers into the system.
       12. Admin will put on the device at the required locations.
       13. Admin will then download mobile application for SSID configuration on the device which have WiFi. Ethernet devices will not need a mobile application.
       14. After downloading mobile application admin will open mobile application. This mobile application will automatically connect to the device and it will have just one page of SSID configuration. User will select correct wifi network and provide password for that network.
       15. Mobile App will pass this SSID information to the device.
       16. Admin of Organisation ABC go to add device page and then will click on add new device link.
       17. The page will ask Admin to add serial no. And admin will provide serial no available on the physical hardware.
       18. If device serial no will match with the system database then it will reflect in the unconfigured device page of the Organisation ABC and with comment “Waiting for connection”
       19. On the other side – After adding SSID information in the device via mobile app - Device will then get connected to internet and start sending data to Server.
       20. On connecting to internet, the devices will start sending data packets to the server. The data will have the serial number and the system will match the serial number to the user of organization ABC to which the device was sold. Then the comment wil change to “Connected and available for configuration”
       21. The user then enters the configuration page and provides all the required data. Once all the data has been entered, the device will no longer be shown as unconfigured device.
3. Configuring Device
   1. Page Title
   2. This page will have form with following fields
      1. Device Name
      2. Serial No
      3. Type of Device (Drop Menu)
      4. Status (Active / InActive)
   3. After Addition of device it will take user to the device configuration page. This will be like wizard or tabs page. It will have 3-4 forms pages.

Should be a configuration Wizard based on tabs on that page.

Screen 1/ Tab 1: Software shows a list of all unconfigured/ first time connected devices

Screen 2/ Tab 2: User Selects the device and it shows all the fields of the "Device Identification Packet"

Screen 3/ Tab 3: User Provides Device Name, Location, Department etc

Screen 4/ Tab 4: User Provides all the data for the fields of the "Device Configuration Packet"

Screen 5/ Tab 5: User Provides all the data for fields of the "Device Communication Packet". Show all available SSIDs and let the user select what network it should connnect to

Screen 6/ Tab 6: User provides all the data for the fields of the “External Device Communication” if its supported.

The complete process should be done in 30 mins, if not done within the time, the window should close.

1. View Devices
   1. This page will have list of devices in table form
   2. Page Title
   3. Table will have column like Name, Serial No, Status, Type
   4. Search Box
   5. Clicking on Device name will take user to device configuration page (i will send this later)
2. Reports

Creator, Auditor and Reviewer at the bottom of the report.   
The person who creates the report is “Creator”. The Creator then sends it to “Reviewer” for review. The reviewer gets a notification on his dashboard. The Reviewer reviews the report and sends it to “Auditor”. The Auditor gets a notification and then approves the report.

On every step, if the report is printed before any of the above steps, only the ones who have gone through the report will be reported.

Graphs:

        - For only one device, show all parameters on one graph

        - For multiple device, one graph for each selected parameter

        - Can user have the choice to select what all parameters he want to show of which all devices on ONE graph

* Auto and Manual Scaling / Zoom facility
* Selectable Line type, Colour and Thickness

Tables:

       - One device or multiple device, user selectable

Data Reports:

        - User selectable parameters per device along with remarks column where alarms will be shown if active

Summary:

* Summary report

Alarm Reports:

      - List of all the alarms, user selectable for the device

1. Reports by Devices
   1. Page Title
   2. This page will have date range filter on top (Start & End Date)
   3. After that there will be chart of device (1 Chart like Dashboard Page)
   4. After chart there will be tabular data with 9 columns namely Name of Device, Date & Time, Temperature figures, Humidity Figures, Status, Alarm Yes or No, Set Point, Set Point Down, Set Point Up
   5. User can export this report to pdf and csv
2. Reports by Parameters
   1. Page Title
   2. This page will have date range filter on top (Start & End Date)
   3. User will pick up the parameters first and submit his selection. Then he will get the list of devices that will show the report.
   4. Report will have chart and there will be tabular data with 9 columns namely Name of Device, Date & Time, Temperature figures, Humidity Figures, Status, Alarm Yes or No, Set Point, Set Point Down, Set Point Up
   5. User can export this report to pdf and csv
3. Device Replacement

User should be able to replace a device with an existing device.

1. Device Calibration
   1. There will be a USB application for the calibration of the devices.
   2. The user will connect the device through USB to the PC.
   3. Run the USB application on the PC.
   4. The USB application asks for user ID and password.
   5. It shows the user all the available sensors on the device.
   6. The user selects the sensor to be put under calibration
   7. The user also puts in the Soak time and the environment value
   8. The device will start to show the values of the current sensor reading
   9. When the soak time has elapsed, the user will press Submit which will send the values of the environment and the sensor at that instant to the device.
   10. The user can go on to calibrate more sensors or close the application.
   11. There is a graph plotted of each sensor reading during calibration