**SMRI (SMART MANUFACTURING READINESS INDEX)A picture containing text

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**Detailed Flow Chart**

**Diagram

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**Methodology**

To understand & implement the various functionalities and features involved in the concept of identifying readiness levels of organizations in Industry 4.0, we require a well-defined structure to the application.

The home page of our application consists of 6 templates or components which provides the user with the proper navigation and access to functionalities provided by the application.

However, the application in its entirety comprises of 15 templates/components (including sub-templates), which are:

1. **Hero Section** - This template is the first template presented to the user which allows them to navigate throughout the different sections of the website using the navigation bar. The navigation bar in addition to providing direct access to various sections of the website, also allows the user with the option to check and access:

* **Repository** - It contains all the official documents, PDF files and white paper uploaded by the administrators to promote or highlight the key features, background functioning and description of the project application.
* **Events** - It contains the log of all the events such as workshops or webinars, either upcoming or in-continuation that users can join through registration.

This template further presents the user with two options, which are to:

* 1. **Log into the application**

To log into the application, the user is required to enter his/her email address and password that they set up while creating their account in the login template.

If in case they do not have an account, they can sign up for a new account by providing their name, email address and password in the sign up template.

Graphical user interface, website

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* 1. **Take assessment**

This template will only be accessible to the user when they have successfully logged into their account and been provided authorization. This template prompts the user to enter certain information required to be stored for each organization that takes the self-assessment ,i.e. Industry sector of the organization, organization name, annual turnover of the organization & the number of employees in the organization. All these fields are necessary to be filled otherwise the application will display error messages on failure to fill either of these.

Both of these options are inter-linked, i.e. if a user wishes to start their self-assessment,

then they are prompted to login to the application (if not done), whereas, if user is already authorized, then they can conduct their self-assessment as per their convenience.

Graphical user interface, website

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1. **Website Goals** - This template presents the definite purpose of the website to the user. It provides a brief overview of SMRI, what it can do and its aim. It assists the users in realizing that they are in the right place and immediately clarifies to the user what the application does.

Graphical user interface

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1. **Call To Action** - This template is important for assisting & guiding users to important sections or functionalities of the application and in completing website goals. This template is further divided into 3 sub-templates which are:
   1. **Information about the features of the application**

This will present the user with a PDF file containing detailed information about the entire project and its purpose, functionalities, outcomes, & goals.

* 1. **Prompt to start self-assessment**

This will open a modal window on the browser, asking the user all the required details before initiating the assessment such as - industry sector, organization name, annual turnover and number of employees.

* 1. **Leaving a review**

This enables the user to leave feedback & suggestions about the application in terms of either features, value provided to the user, etc.

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1. **Body -** This template contains the most amount of content & information about the application. It contains the flow of the procedure to be followed while filling the self-assessment and guides the user about each step of the process. It comprises of 3 sections:
   1. **Pick custom-built models -** The user has access and option to choose from the survey models provided by the application.
   2. **Fill the corresponding survey of the model -** The user is further required to fill a comprehensive survey/questionnaire corresponding to the model selected by them. It contains a set of dimensions for assessing and evaluating the company based on the score of the company in each dimension.
   3. **View survey analysis -** After filling the survey, the user can navigate to the analysis template and view the overview of the collective responses recorded of all companies. It provides the analysis of the results obtained from calculations done on the entirety of the responses recorded from various companies and visualizes them in the form of graphs.

Graphical user interface, website

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1. **Meet the team** - This template provides the information about the project leads and key developers that contributed to the development of the application. It contains brief description about each key person associated with the project and the links to their social media. It helps users to feel at ease and builds trust in the users and is also an easy & effective way to give a face to the application.

Graphical user interface, application, Teams

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1. **Footer** - This template provides the round-up information of the entire website including important links to different section. The footer is also where the user would expect to find contact information of the project developers and an option to sign up for further updates.
2. **Interior Pages**
   1. **Assessment Template**

This template provides the user with the survey assessment form corresponding to the model selected by the user. It provides the user with two ways to fill the survey and enter their company results into the application for analysis:

**Manual Entry** - In this method, the user fills the survey form manually by selecting the appropriate band score for each & every dimension given. The score for each dimension will have an impact on the overall results of the organization, since each dimension has differing weights associated with them.

**Excel Upload** - In this method, the user is required to upload the band scores in the form of an excel sheet in a specified format. Since, the upload requires the file to be in a definite format, the application allows the user to download a sample excel sheet for filling their results.

Graphical user interface, text

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* 1. **Analysis Visualization**

This template brings together the overview of all the responses from various organizations that have filled the survey of a model. This template presents the visualization of the final results to the user, so that they can identify the progress of the companies in each dimension and also identify those dimensions in which majority of the companies are struggling with. Along with the percentage of companies unfit for Industry 4.0, it also presents 3 graphs to the user:

* **Uncensored headcount ratio** - This graph shows the percentage of companies that are deprived in a particular dimension.
* **Censored headcount ratio** - This graph shows the percentage of companies in each dimension that are both unfit for Industry 4.0 and deprived in that particular dimension as well.
* **Dimensional Contribution** - This graph shows the weightage/contribution of each dimension in the calculation of the overall percentage of unfit companies.