



CAPSTONE PROJECT 2

CMU-SE-451 / CMU-IS-451 / CMU-CS-451

INTERFACE DESIGN

Version 2.2

Date: 1 - Mar - 2021

EXPERT-DRIVEN SMART DASHBOARD APPLICATION

Submitted by

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Capstone Project 2 - Mentor:

Name

Signature

Date

Binh, Thanh Nguyen _____

A handwritten signature in blue ink, appearing to read 'Nguyen Binh', written over a horizontal line.

_____ 26 - May - 2020

PROJECT INFORMATION			
Project Acronym	EDSDA		
Project Title	Expert-Driven Smart Dashboard Application		
Project Web URL	https://sda-research.ml/		
Start Date	01 - Mar - 2021		
End Date:	02 - Jun - 2021		
Lead Institution	International School, Duy Tan University		
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DOCUMENT INFORMATION			
Document Title	Interface Design		
Author(s)	Team C2SE.06		
Role	[EDSDA] Interface Design v2.2		
Date	01 - Mar - 2021	Filename	[EDSDA] 005 Interface Design
URL	https://github.com/sdateamdtu2020/SDA-v2.0		
Access	Project and CMU Program		

REVISION HISTORY

Version	Person(s)	Date	Description	Approval
Draft	Tin, Pham	01 - Mar - 2021	Initiate document	x
2.0	Tin, Pham	14 - Mar - 2021	Finish content of interface design	x
2.1	Tin, Pham	01 - Apr - 2021	Update new UI	x
2.2	Tin, Pham	20 - May - 2021	Fix typography	x

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1. INTRODUCTION

1.1. PURPOSE OF DOCUMENT

This IDD of the SDA system has the following purpose:

- Document the design of user interface of functions of SDA
- Be the primary document driving the implementation of the user interfaces.
- Introduce interface design for the reader. Including the background, content information display, command buttons.

1.2. INTENDED AUDIENCES

This IDD is intended for the following audiences:

- Technical reviewers including:
 - Scrum Master
 - Product owner
- Implementers, including:
 - Developers.
 - Testers.

1.3. DOCUMENT OVERVIEW

This IDD is organized into the following sections:

- This document helps to better understand the interface of the Smart Dashboard Application System, detailed specification components and function of the Application.
- With this document, the development team can understand the structure and composition to create a consistent and complete system.
- Overview of the stages and modules of the software and create a complete interface.

2. BRAND IDENTITY

2.1. LOGO



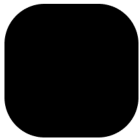
2.2. TYPOGRAPHY

Font Family		
No	Name	Font Family
1	Primary	IBM Plex Sans
2	Secondary	Source Sans Pro
3	Another	sans-serif

Typography				
No	Name	Font size (px)	Line-Height (px)	Weight
1	Title	12	16	Bold, uppercase
2	Button	14	18	Bold
3	Headline	16	21	Bold
4	Body	14	18	Regular
5	Caption	12	16	Regular

2.3. COLOR

Basic



#000



#FFF

Primary



#524F88



#FF0072



#1A192B

Secondary



#C5CBD2



#F8F8F2



#221F38

Button



#FF0072

#FFFFFF

CTA btn



#FFFFFF

#FF0072

CTA :hover



#FFFFFF

transparent

Ghost btn



#FFFFFF

#FF0072

Ghost :hover



#F8F8F2

transparent

Text btn



#FF0072

transparent

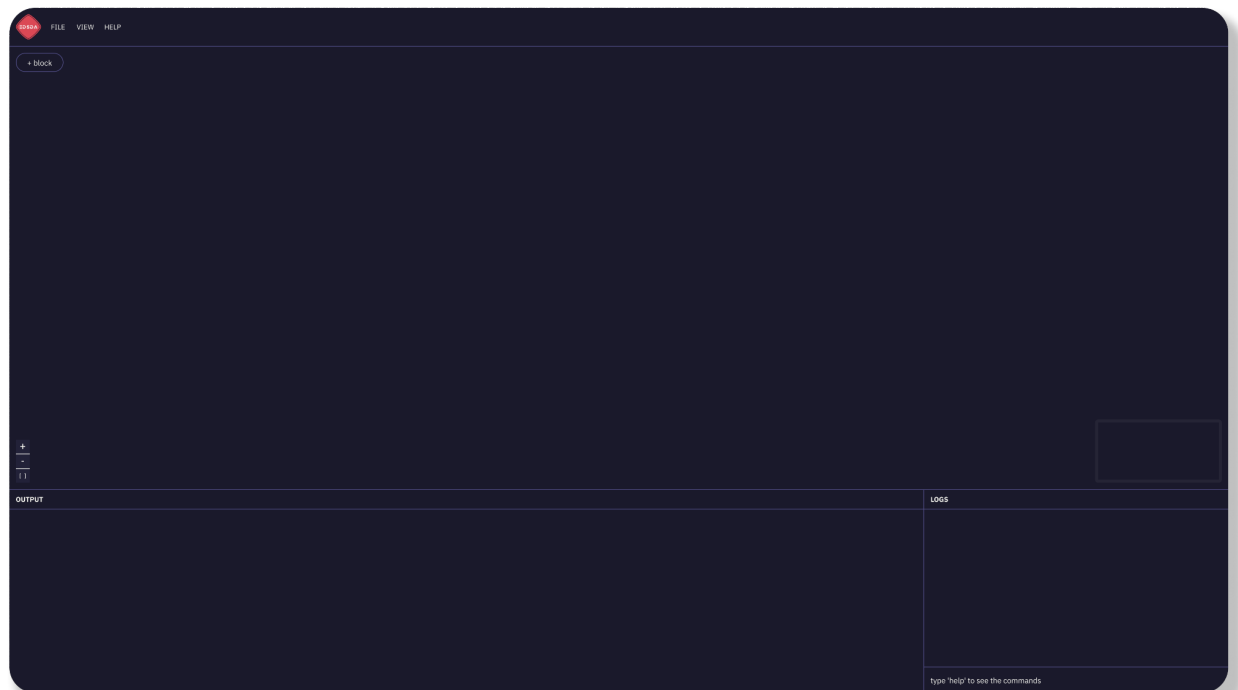
Text :hover

3. DETAILED INTERFACE DESIGN

To view the all the screen and UI Design, connect to figma link:

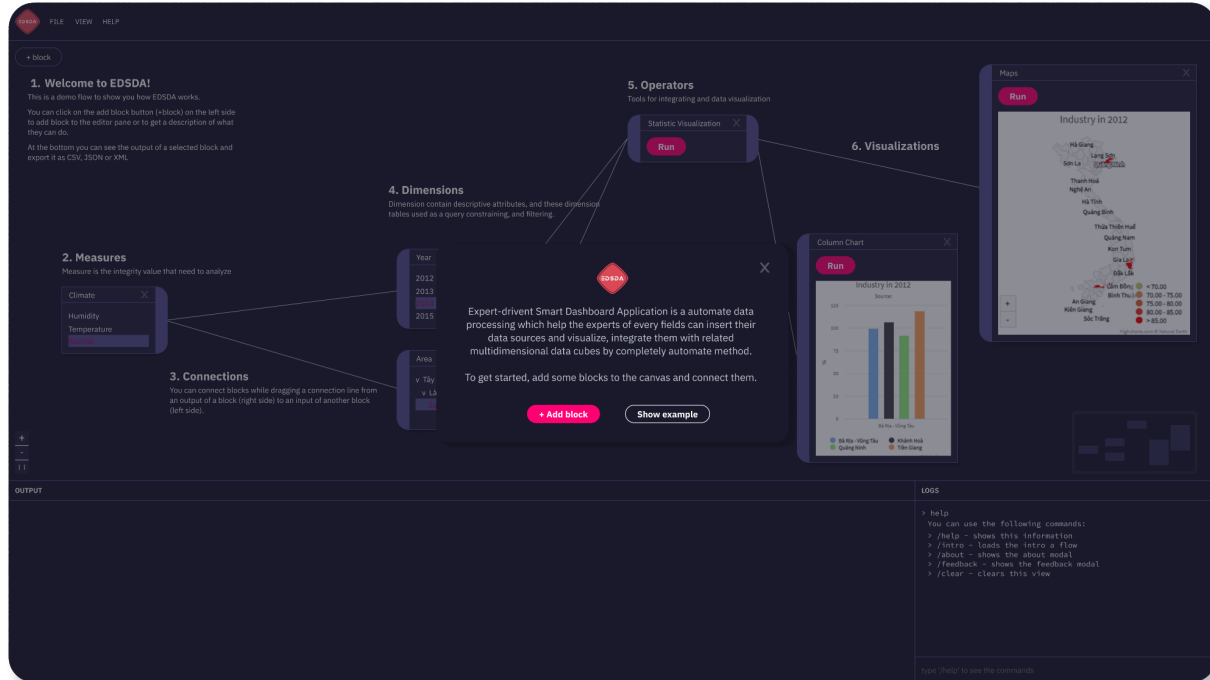
<https://www.figma.com/file/zTQJXv6HdxFLHDVznar2ms/EDSDA-Design?node-id=501%3A56>

3.1. DEFAULT



Default screen

3.2. INTRODUCTION



Content:

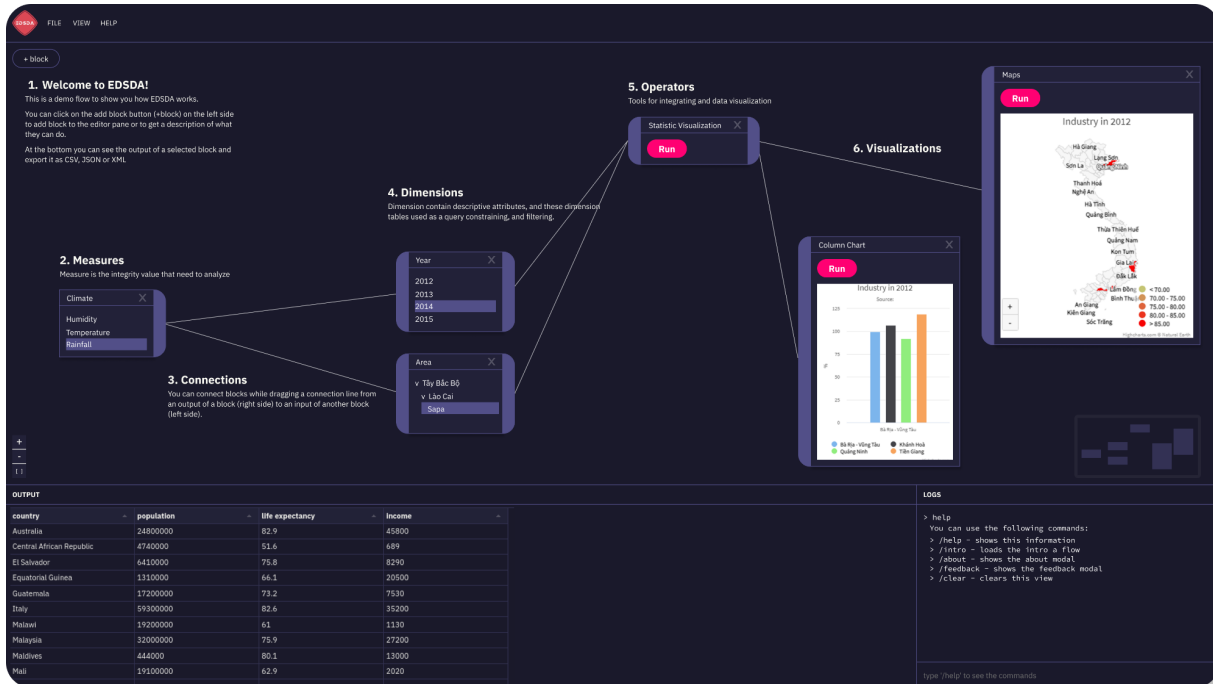
Expert-driven Smart Dashboard Application is an automated data processing tool that helps the experts of every field insert their data sources and visualize, integrate them with related multidimensional data cubes by a completely automated method.

To get started, add some blocks to the canvas and connect them.

Button onClick:

- Add block: clear all widgets, and open the “Add widget” popup
- Show example: in the 3.3 Show Example

3.3. EXAMPLE



Content:

1. Welcome

Content:

Welcome to ESDSA!

This is a demo flow to show you how ESDSA works.

You can click on the add block button (+block) on the left side to add block to the editor pane or to get a description of what they can do.

At the bottom, you can see the output of a selected block and export it as CSV, JSON, or XML

2. Measures

Content:

Measure is the integrity value that needs to analyze



Show widget Climate, and select Rainfall

3. Connections

Content:

You can connect blocks while dragging a connection line from an output of a block (right side) to an input of another block (left side).

4. Dimensions

Content:

Dimensions contain descriptive attributes, and these dimension tables used as query constraining, and filtering.

Show widgets: Year (2014), Area (Sapa)

5. Operator

Content:

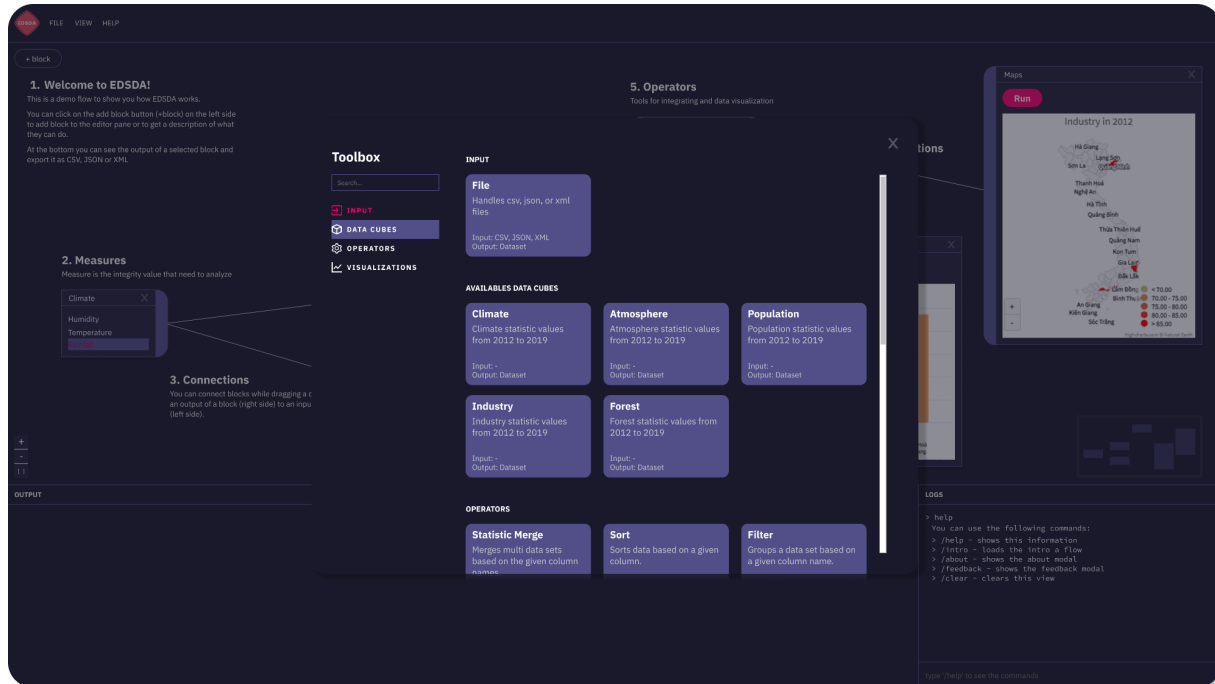
Tools for integrating and data visualization

Show widgets: Statistic Visualization

6. Visualizations

Show widgets: Column Chart & Maps

3.4. TOOLBOX



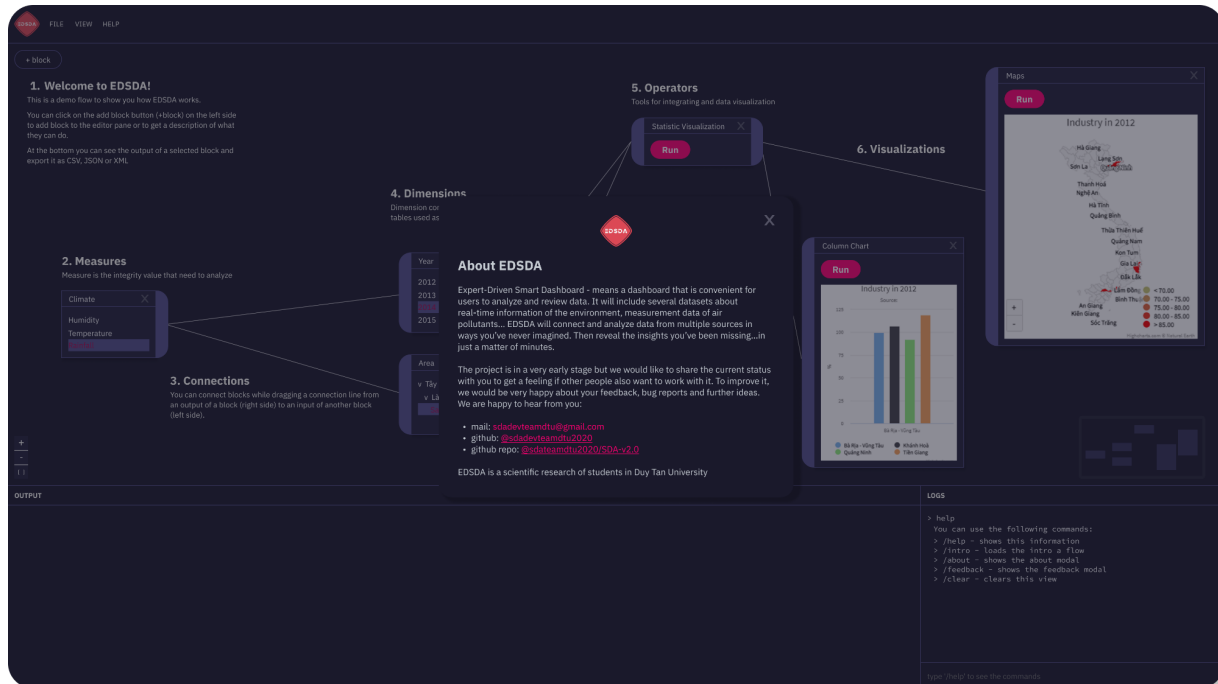
The Toolbox includes 4 types:

- Input
- Data Cubes
- Operators
- Visualizations

Title	Description	Input	Output
Input			
File	Handles csv, json, or xml files	CSV, JSON, XML	Dataset
Data Cubes			
Climate	Climate statistic values from 2012 to 2019	-	Dataset
Atmosphere	Atmosphere statistic values from 2012 to 2019	-	Dataset

Population	Population statistic values from 2012 to 2019	-	Dataset
Industry	Industry statistic values from 2012 to 2019	-	Dataset
Forest	Forest statistic values from 2012 to 2019	-	Dataset
Operators			
Statistic Merge	Merges multi data sets based on the given column names.	Dataset	Dataset
Sort	Sorts data based on a given column.	Dataset	Dataset
Filter	Groups a data set based on a given column name.	Dataset	Dataset
Visualizations			
Table	Merges multi data sets based on the given column names.	Dataset	Table
Column Chart	Displays a column chart of given x and y column names.	Dataset	Chart
Line Chart	Displays a line chart of given x and y column names.	Dataset	Chart
Multi Y-Axis Chart	Displays a multi Y-axis chart of given x and multi y column names.	Dataset	Chart
Pie Chart	Displays a pie chart of given x and y column names.	Dataset	Chart
Maps	Displays a maps of given data maps	Dataset	Maps

3.5. ABOUT



Content:

About ESDSA

Expert-Driven Smart Dashboard - means a dashboard that is convenient for users to analyze and review data. It will include several datasets about real-time information of the environment, measurement data of air pollutants... ESDSA will connect and analyze data from multiple sources in ways you've never imagined. Then reveal the insights you've been missing...in just a matter of minutes.

The project is in a very early stage but we would like to share the current status with you to get a feeling if other people also want to work with it. To improve it, we would be very happy about your feedback, bug reports and further ideas.

We are happy to hear from you:

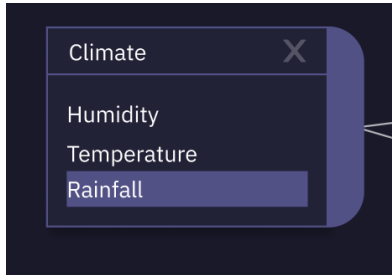
mail: sdadevteamdtu@gmail.com

github: [@sdateamdtu2020](https://github.com/sdateamdtu2020)

github repo: [@sdateamdtu2020/SDA-v2.0](https://github.com/sdateamdtu2020/SDA-v2.0)

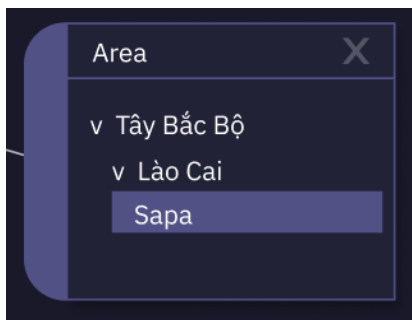
ESDSA is a scientific research of students in Duy Tan University

3.6. WIDGET WITH PORT OUT



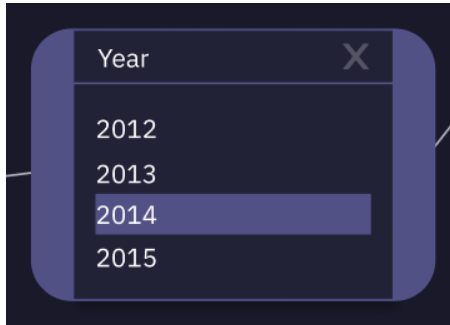
Name	Font size	Color	Line height	Another
Title	12	#FFF	16	
Tree Item	12	#FFF	16	
Tree Item hover	12	#FFF	16	Background: #524F88

3.7. WIDGET WITH PORT IN



Name	Font size	Color	Line height	Another
Title	12	#FFF	16	
Tree Item	12	#FFF	16	
Tree Item hover	12	#FFF	16	Background: #524F88

3.8. WIDGET WITH TWO PORT



Name	Font size	Color	Line height	Another
Title	12	#FFF	16	
Tree Item	12	#FFF	16	
Tree Item hover	12	#FFF	16	Background: #524F88

4. REFERENCES

- Figma link:
<https://www.figma.com/file/zTQJXv6HdxFLHDVznar2ms/EDSDA-Design?node-id=0%3A1>