

CAPSTONE PROJECT 1

CMU-SE-450 / CMU-IS-450 / CMU-CS-450

INTERFACE DESIGN DOCUMENT

Version 1.2

Date: 15 - Nov - 2020

SMART DASHBOARD APPLICATION

Submitted by

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Approved by

Name Signature Date Binh, Thanh Nguyen _______14 - Dec- 2020 Name Signature Date Huy, Truong Dinh _______

| PROJECT INFORMATION | | | | | |
|---|--|-----------------------------|--------------|--|--|
| Project Acronym | SDA | | | | |
| Project Title | Smart Dashboard A | Application | | | |
| Project Web URL | https://sda-researd | ch.ml/ | | | |
| Start Date | 12 - Aug - 2020 | | | | |
| End Date: | 15 - Dec - 2020 | | | | |
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| | DOCUMENT INFORMATION | | | | |
|----------------|---|---|--|--|--|
| Document Title | Interface Design Docu | ıment | | | |
| Author(s) | Team C1SE.06 | | | | |
| Role | [SDA] Interface_Design_v1.2 | | | | |
| Date | 15 - Nov - 2020 | 15 - Nov - 2020 File name [SDA] Interface_Design_v1.2 | | | |
| URL | https://github.com/sdateamdtu2020/sda-documents | | | | |
| Access | Project and CMU Prog | ram | | | |

REVISION HISTORY

| Version | Person(s) | Date | Description | Approval |
|---------|-----------|-----------------|------------------------------------|----------|
| Draft | Tin, Pham | 12 - Aug - 2020 | Initiate document | Х |
| 1.0 | Tin, Pham | 15 - Nov - 2020 | Finish content of interface design | Х |
| 1.1 | Tin, Pham | 20 - Nov - 2020 | Update UI | Х |
| 1.2 | Tin | 13 - Dec - 2020 | Update UI when merge | Х |
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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:
 - o Developers.
 - Testers.

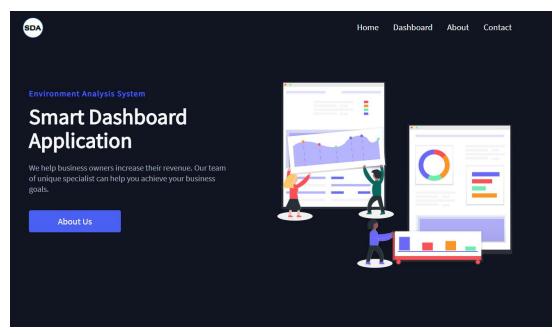
1.3. DOCUMENT OVERVIEW

This IDD is organized into the following sections:

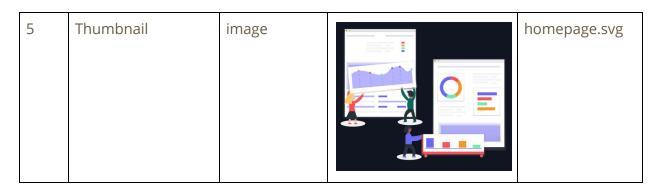
- This document helps to better understand the interface of the Smart Dashboard Application System, detailed specification components and function of the Application.
- With this document, the development team can understand the structure and composition to create a consistent and complete system.
-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

2. DETAILED INTERFACE DESIGN

2.1. Homepage

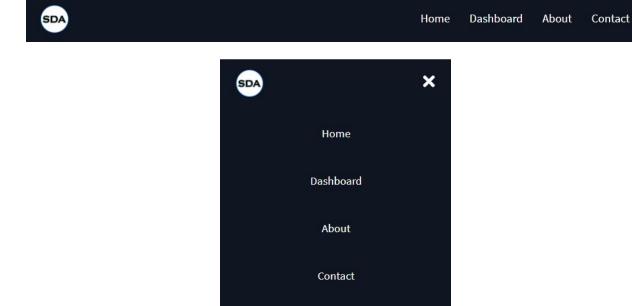


| | Homepage | | | | | |
|-----|------------|--------|--|------------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Background | | Background: #101522 | | | |
| 2 | Heading | H1 tag | Font-size: 48px Font-weight: 600 Color: #f7f8fa | Smart Dashboard Application | | |
| 3 | Subtitle | P tag | Font-size: 18px Color: #a9b3c1 | Short introduction about SDA | | |
| 4 | Button | button | Background: #4b59f7 Padding: 10 20px Color: #fff Font-size: 16px; | Redirect to /about page | | |



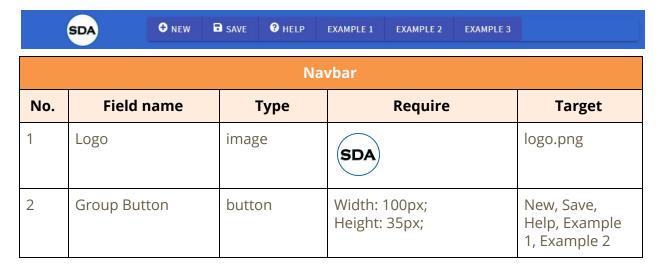
2.2. Navbar

2.2.1. IN HOME PAGE



| | Navbar | | | | | |
|-----|------------|-------|--|---------------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Logo | image | SDA | logo.png | | |
| 2 | Menu | List | Height: 90px; Font-size: 19px; Font-family: "Source sans pro". Responsive: max-width: 960px; | Home, Dashboard, About, Contact | | |

2.2.2. IN DASHBOARD PAGE

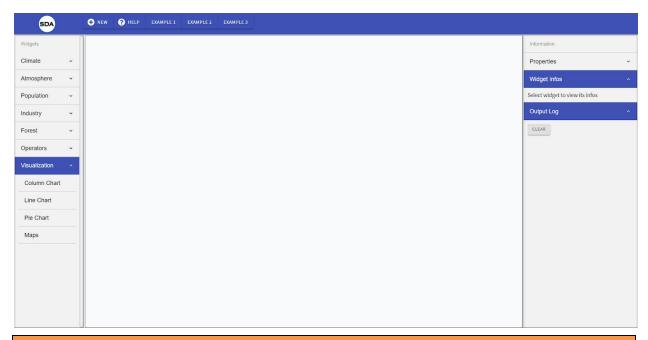


2.3. Footer



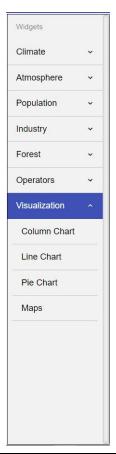
| | Footer | | | | | |
|-----|-------------|-------------|--|---|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Logo | image | SDA | logo.png | | |
| 2 | Credits | P tag | Font-size: 19px; Font-family: "source sans pro" Responsive: 960px | SDA-Team © 2020 | | |
| 3 | Github Link | Icon Button | lcon name: "FaGithub" | https://github.co m/sdateamdtu20 20 | | |

2.4. Dashboard page



| | Dashboard page | | | | | |
|-----|----------------|------|-------------------------------------|--------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Toolbar | div | Width: 185px Height: full height | | | |
| 2 | Info | div | Width: 320px | | | |
| 3 | MashupContent | div | Width: 100vw - toolbar - info | | | |

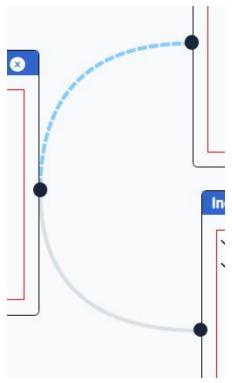
2.5. Toolbar



| | Toolbar | | | | | | |
|-----|------------|---------------|--|--|--|--|--|
| No. | Field name | Туре | Require | Target | | | |
| 1 | Widgets | Dropdown menu | Climate: Average Temporecipitation, Average Randamosphere: Air Quality Filter Population: Population Industry: Industry Productorest: Forest Cover Area Operators: Statistics Mer Visualization: Column Chart, Maps Each dataSet have 3 dim Period of City | ction a, AfForestation ge, Simple Merge nart, Line Chart, Pie | | | |

| 2 | Default state is Open | Visualization: true |
|---|-----------------------|---|
| 3 | ListItem | Color: rgb(242, 242, 242), hover: #3f51b5 |

2.6. Connector



| Connector | | | | | |
|-----------|------------|--------|--------------------|--------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Line | SVG | Stroke: #dae1e7; | | |
| 2 | Port | Button | Port In & Port Out | | |

2.7. Industry Production

2.7.1. IN TREE VIEW

Filter By Year



| | Industry Production | | | | | |
|-----|---------------------|--------|--|--|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | | |
| 3 | Close | button | Icon name: AiFillCloseCircle | When onClick, close the node | | |
| 4 | Port | button | Port In & Port Out | | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container | | |

| 6 | Data | | 2012 to 2019 | |
|---|------|--|--------------|--|
|---|------|--|--------------|--|

Filter By City



| | Industry Production | | | | | |
|-----|---------------------|--------|---|---------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | | |
| 3 | Close | button | lcon name: AiFillCloseCircle | When onClick, close the node | | |
| 4 | Port | button | Port In & Port Out | | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget | | |

| | | | info in Info container |
|---|------|-------------------|---------------------------|
| 6 | Data | 64 province in VN | |

Filter By Period of City



| | Industry Production | | | | |
|-----|---------------------|--------|---|------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | |
| 3 | Close | button | Icon name: AiFillCloseCircle | When onClick, close the node | |
| 4 | Port | button | Port In & Port Out | | |

| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container |
|---|------|--------|---|--|
| 6 | Data | | City: 64 province in VN FromYear: 2012 to 2019 ToYear: 2012 to 2019 ToYear > FromYear | |

2.7.2. IN VISUALIZATION

Column



| Maps | | | | | |
|------|------------|--------|---------------|--------------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Chart | Column | Width: 350px; | Industry of cities from 2012 to 2019 | |

| 2 | Port | button | Port in | | | |
|---|------------|--------|--|------------------|----|----|
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry 2012 | of | VN |

Line Chart



| | Maps | | | | | |
|-----|------------|--------|--|--------------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Chart | Line | Width: 350px; | Industry of cities from 2012 to 2019 | | |
| 2 | Port | button | Port in | | | |
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry of VN 2012 | | |

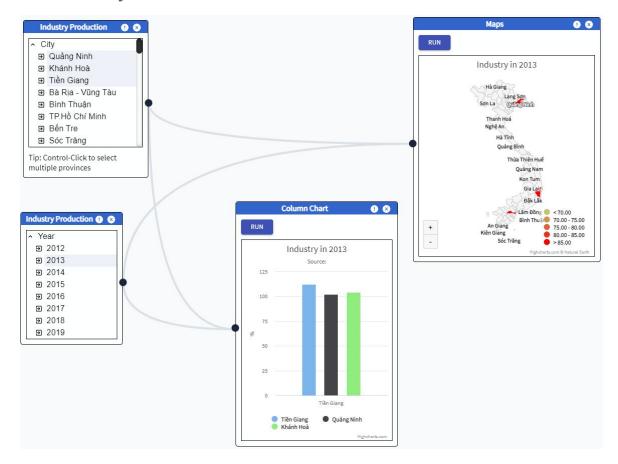
Maps



| | Maps | | | | | |
|-----|------------|------------------------|--|--------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Maps | HighChart/Highma ps | Width: 350px; colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | Industry of VN 2012 to 2019 | | |
| 2 | Port | button | Port in | | | |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", colorRange: | | | |

| 4 | Maps Title | Default: "" Running: "Ir VN \${year}" | Industry 2012 | of | VN |
|---|------------|---|---------------|----|----|

Viz data Cities in year



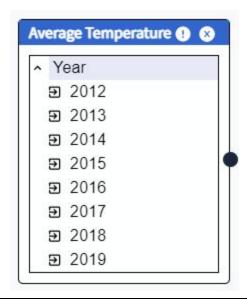
| | Cities In Year | | | | |
|-----|----------------|------------------------|--|----------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Maps | HighChart/Highma ps | Width: 350px; colorAxis: min: 50, minColor: "#E6E7E8", | Industry of cities in year | |

| | | | maxColor: "#005645", | |
|---|------------|--------|---|----------------------------|
| 2 | Chart | Column | Width: 300px; | Industry of cities in year |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", colorRange: | |
| 4 | Maps Title | | Default: "" Running: "Industry in \${year}" | Industry in year |

2.8. TEMPERATURE

2.8.1. IN TREE VIEW

Filter By Year



| | TEMPERATURE | | | | | |
|-----|-------------|--------|---|--|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Icon | image | lcon name: MdExpandLess, MdExpandMore, MdExitToApp | | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Average Temperature | | |
| 3 | Close | button | lcon name: AiFillCloseCircle | When onClick, close the node | | |
| 4 | Port | button | Port In & Port Out | | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container | | |

| 6 | Data | | 2012 to 2019 | |
|---|------|--|--------------|--|
|---|------|--|--------------|--|

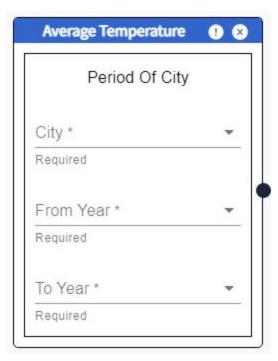
Filter By City



| | TEMPERATURE | | | | | | |
|-----|-------------|--------|---|--|--|--|--|
| No. | Field name | Туре | Require | Target | | | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | | | |
| 3 | Close | button | Icon name: AiFillCloseCircle | When onClick, close the node | | | |
| 4 | Port | button | Port In & Port Out | | | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container | | | |

| 6 | Data | Cà Mau, Đà Lạt, Đà Nẵng, Hà Nội, Huế, Lai Châu, Nam Định, Nha Trang, Pleiku, Qui |
|---|------|---|
| | | Nhơn, Sơn La, Tuyên Quang, Vinh, Vũng Tàu |

Filter By Period of City



| | TEMPERATURE | | | | |
|-----|-------------|--------|---|------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | |
| 3 | Close | button | lcon name: AiFillCloseCircle | When onClick, close the node | |

| 4 | Port | button | Port In & Port Out | |
|---|------|--------|---|--|
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container |
| 6 | Data | | City: Cà Mau, Đà Lạt, Đà Nẵng, Hà Nội, Huế, Lai Châu, Nam Định, Nha Trang, Pleiku, Qui Nhơn, Sơn La, Tuyên Quang, Vinh, Vũng Tàu FromYear: 2012 to 2019 ToYear: 2012 to 2019 ToYear > FromYear | |

2.8.2. IN VISUALIZATION

Column



Column

| No. | Field name | Туре | Require | Target | |
|-----|------------|--------|--|--------------------------------------|--|
| 1 | Chart | Column | Width: 350px; | Industry of cities from 2012 to 2019 | |
| 2 | Port | button | Port in | | |
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry of VN 2012 | |

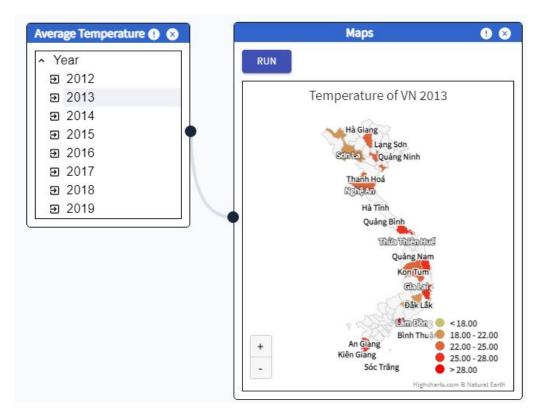
Line Chart



| | Line | | | | |
|-----|------------|--------|---------------|--------------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Chart | Line | Width: 350px; | Industry of cities from 2012 to 2019 | |
| 2 | Port | button | Port in | | |

| 3 Maps Title | Default: "" Running: "Industry of VN \${year}" | Industry 2012 | of | VN |
|--------------|--|------------------|----|----|
|--------------|--|------------------|----|----|

Maps



| | Maps | | | | | |
|-----|------------|------------------------|--|--------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Maps | HighChart/Highma ps | Width: 350px; colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | Industry of VN 2012 to 2019 | | |
| 2 | Port | button | Port in | | | |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", | | | |

| | | maxColor: "rgb(247, 2, 2)", colorRange: | | |
|---|------------|---|------------------------|----|
| 4 | Maps Title | Default: "" Running: "Temperature of VN \${year}" | Temperature VN 2012 | of |

Viz data Cities in year



| Cities In Year | | | |
|------------------------|--------------|--|--|
| No. Field name Type Ro | quire Target | | |

| 1 | Maps | HighChart/Highma ps | Width: 350px; colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | Temperature of cities in year |
|---|------------|------------------------|--|-------------------------------|
| 2 | Chart | Column | Width: 300px; | Temperature of cities in year |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", colorRange: | |
| 4 | Maps Title | | Default: "" Running: "Temperature in \${year}" | Temperature in year |

2.9. Humidity

2.9.1. IN TREE VIEW

Filter By Year



| | Humidity | | | | |
|-----|------------|--------|---|---------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Average Humidity | |
| 3 | Close | button | lcon name: AiFillCloseCircle | When onClick, close the node | |
| 4 | Port | button | Port In & Port Out | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget | |

| | | | info in Info container |
|---|------|--------------|---------------------------|
| 6 | Data | 2012 to 2019 | |

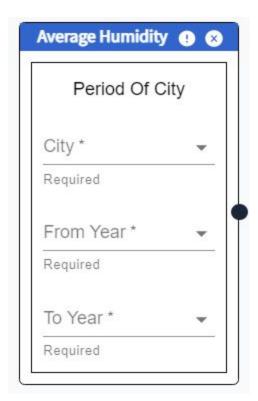
Filter By City



| | Humidity | | | | |
|-----|------------|--------|---|------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | |
| 3 | Close | button | Icon name: AiFillCloseCircle | When onClick, close the node | |

| 4 | Port | button | Port In & Port Out | |
|---|------|--------|---|--|
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container |
| 6 | Data | | Cà Mau, Đà Lạt, Đà Nẵng, Hà Nội, Huế, Lai Châu, Nam Định, Nha Trang, Pleiku, Qui Nhơn, Sơn La, Tuyên Quang, Vinh, Vũng Tàu | |

Filter By Period of City



| | Humidity | | | | |
|-----|------------|-------|-----------------------------|--------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Icon | image | lcon name: MdExpandLess, | | |

| | | | MdExpandMore, MdExitToApp | |
|---|--------|--------|---|--|
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production |
| 3 | Close | button | lcon name: AiFillCloseCircle | When onClick, close the node |
| 4 | Port | button | Port In & Port Out | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container |
| 6 | Data | | City: Cà Mau, Đà Lạt, Đà Nẵng, Hà Nội, Huế, Lai Châu, Nam Định, Nha Trang, Pleiku, Qui Nhơn, Sơn La, Tuyên Quang, Vinh, Vũng Tàu FromYear: 2012 to 2019 ToYear: 2012 to 2019 ToYear > FromYear | |

2.9.2. IN VISUALIZATION

Column



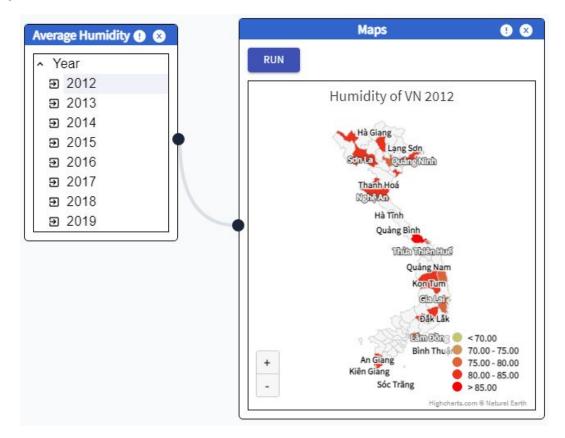
| | Column | | | | |
|-----|------------|--------|--|--------------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Chart | Column | Width: 350px; | Industry of cities from 2012 to 2019 | |
| 2 | Port | button | Port in | | |
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry of VN 2012 | |

Line Chart



| | Line | | | | |
|-----|------------|--------|--|--------------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Chart | Line | Width: 350px; | Humidity of cities from 2012 to 2019 | |
| 2 | Port | button | Port in | | |
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry of VN 2012 | |

Maps



| | Maps | | | | |
|-----|------------|------------------------|--|--------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Maps | HighChart/Highma ps | Width: 350px; colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | Industry of VN 2012 to 2019 | |
| 2 | Port | button | Port in | | |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", colorRange: | | |

| | | From 22 to 25 From 25 to 28 From 28 Hover: color: #EEDD66 | | | |
|---|------------|--|------------------|----|----|
| 4 | Maps Title | Default: "" Running: "Humidity of VN \${year}" | Humidity 2012 | of | VN |

Viz data Cities in year



| Cities In Year | | | | |
|----------------|------------|------------------------|---------------|----------------------------|
| No. | Field name | Туре | Require | Target |
| 1 | Maps | HighChart/Highma ps | Width: 350px; | Humidity of cities in year |

| | | | colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | |
|---|------------|--------|---|----------------------------|
| 2 | Chart | Column | Width: 300px; | Humidity of cities in year |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", colorRange: | |
| 4 | Maps Title | | Default: "" Running: "Humidity in \${year}" | Humidity in year |

2.10. Rainfall

2.10.1. IN TREE VIEW

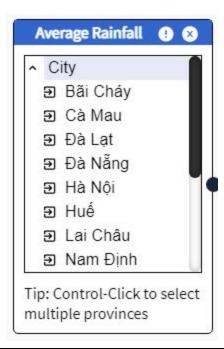
Filter By Year



| | Rainfall | | | | | |
|-----|------------|--------|---|--|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Average Rainfall | | |
| 3 | Close | button | Icon name: AiFillCloseCircle | When onClick, close the node | | |
| 4 | Port | button | Port In & Port Out | | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container | | |

| 6 | Data | | 2012 to 2019 | |
|---|------|--|--------------|--|
|---|------|--|--------------|--|

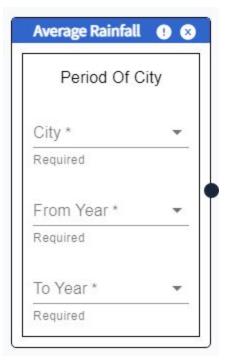
Filter By City



| | Rainfall | | | | | |
|-----|------------|--------|---|---------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | | |
| 3 | Close | button | lcon name: AiFillCloseCircle | When onClick, close the node | | |
| 4 | Port | button | Port In & Port Out | | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget | | |

| | | | info in Info container |
|---|------|---|---------------------------|
| 6 | Data | Cà Mau, Đà Lạt, Đà Nẵng, Hà Nội, Huế, Lai Châu, Nam Định, Nha Trang, Pleiku, Qui Nhơn, Sơn La, Tuyên Quang, Vinh, Vũng Tàu | |

Filter By Period of City



| | Rainfall | | | | | |
|-----|------------|-------|---|------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" | Industry Production | | |

| | | | Font-weight: bold | |
|---|-------|--------|---|--|
| 3 | Close | button | Icon name: AiFillCloseCircle | When onClick, close the node |
| 4 | Port | button | Port In & Port Out | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container |
| 6 | Data | | City: Cà Mau, Đà Lạt, Đà Nẵng, Hà Nội, Huế, Lai Châu, Nam Định, Nha Trang, Pleiku, Qui Nhơn, Sơn La, Tuyên Quang, Vinh, Vũng Tàu FromYear: 2012 to 2019 ToYear: 2012 to 2019 ToYear > FromYear | |

2.10.2. IN VISUALIZATION

Column



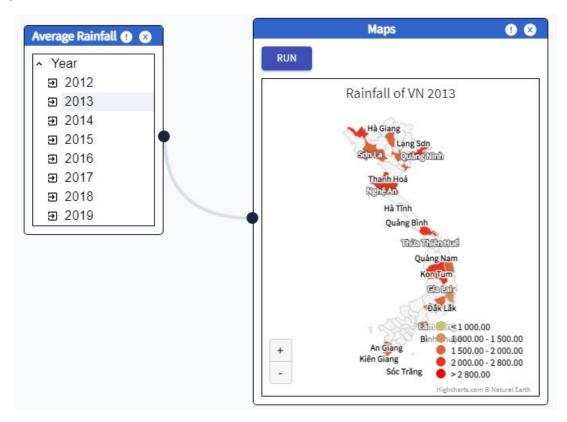
| Column | | | | | | |
|-----------------------------|------------|--------|--|--------------------------------------|--|--|
| No. Field name Type Require | | | | Target | | |
| 1 | Chart | Column | Width: 350px; | Industry of cities from 2012 to 2019 | | |
| 2 | Port | button | Port in | | | |
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry of VN 2012 | | |

Line Chart



| | Line | | | | | |
|-----|------------|--------|--|--------------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Chart | Line | Width: 350px; | Rainfall of cities from 2012 to 2019 | | |
| 2 | Port | button | Port in | | | |
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry of VN 2012 | | |

Maps



| | Maps | | | | | | |
|-----|------------|------------------------|--|--------------------------------|--|--|--|
| No. | Field name | Туре | Require | Target | | | |
| 1 | Maps | HighChart/Highma ps | Width: 350px; colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | Industry of VN 2012 to 2019 | | | |
| 2 | Port | button | Port in | | | | |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", colorRange: | | | | |

| | | From 22 to 25 From 25 to 28 From 28 Hover: color: #EEDD66 | | | |
|---|------------|--|------------------|----|----|
| 4 | Maps Title | Default: "" Running: "Rainfall of VN \${year}" | Rainfall 2012 | of | VN |

Viz data Cities in year



| | Cities In Year | | | | |
|-----|----------------|------|---------|--------|--|
| No. | Field name | Туре | Require | Target | |

| 1 | Maps | HighChart/Highma ps | Width: 350px; colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | Rainfall of cities in year |
|---|------------|------------------------|--|----------------------------|
| 2 | Chart | Column | Width: 300px; | Rainfall of cities in year |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", colorRange: | |
| 4 | Maps Title | | Default: "" Running: "Rainfall in \${year}" | Rainfall in year |

2.11. Population

2.11.1. IN TREE VIEW

Filter By Year



| | Population | | | | |
|-----|------------|--------|--|--|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Average Population | |
| 3 | Close | button | Icon name: AiFillCloseCircle | When onClick, close the node | |
| 4 | Port | button | Port In & Port Out | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container | |

| 6 | Data | | 2012 to 2019 | |
|---|------|--|--------------|--|
|---|------|--|--------------|--|

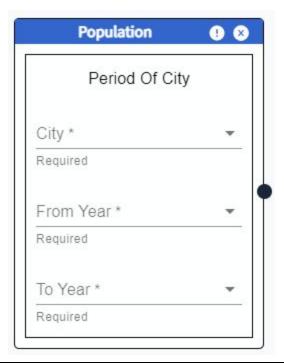
Filter By City



| | Population | | | | |
|-----|------------|--------|---|---------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Icon | image | Icon name: MdExpandLess, MdExpandMore, MdExitToApp | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | |
| 3 | Close | button | lcon name: AiFillCloseCircle | When onClick, close the node | |
| 4 | Port | button | Port In & Port Out | | |
| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget | |

| | | | info in Info container |
|---|------|-----------------|---------------------------|
| 6 | Data | 64 cities in VN | |

Filter By Period of City



| | Population | | | | |
|-----|------------|--------|---|------------------------------|--|
| No. | Field name | Туре | Require | Target | |
| 1 | Icon | image | lcon name: MdExpandLess, MdExpandMore, MdExitToApp | | |
| 2 | Header | P tag | Font-size: 16px Font-family: "Source sans pro" Font-weight: bold | Industry Production | |
| 3 | Close | button | lcon name: AiFillCloseCircle | When onClick, close the node | |
| 4 | Port | button | Port In & Port Out | | |

| 5 | Info | button | Icon name: RiErrorWarningFill | When onClick, display widget info in Info container |
|---|------|--------|--|--|
| 6 | Data | | City: 64 cites in VN FromYear: 2012 to 2019 ToYear: 2012 to 2019 ToYear > FromYear | |

2.11.2. IN VISUALIZATION

Column



Column

| No. | Field name | Туре | Require | Target |
|-----|------------|--------|--|--------------------------------------|
| 1 | Chart | Column | Width: 350px; | Industry of cities from 2012 to 2019 |
| 2 | Port | button | Port in | |
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry of VN 2012 |

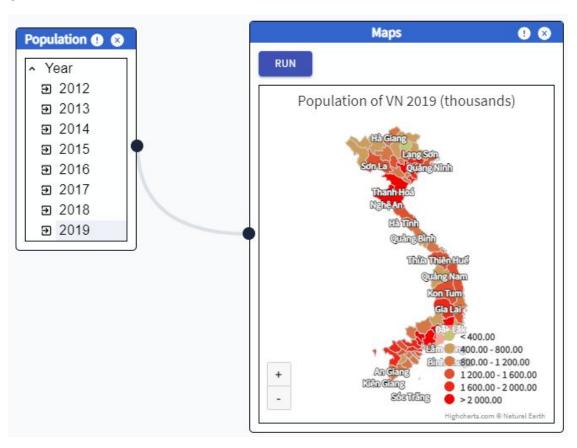
Line Chart



| | Line | | | | |
|-----|------------|------|---------|--------|--|
| No. | Field name | Туре | Require | Target | |

| 1 | Chart | Line | Width: 350px; | Population of cities from 2012 to 2019 |
|---|------------|--------|--|--|
| 2 | Port | button | Port in | |
| 3 | Maps Title | | Default: "" Running: "Industry of VN \${year}" | Industry of VN 2012 |

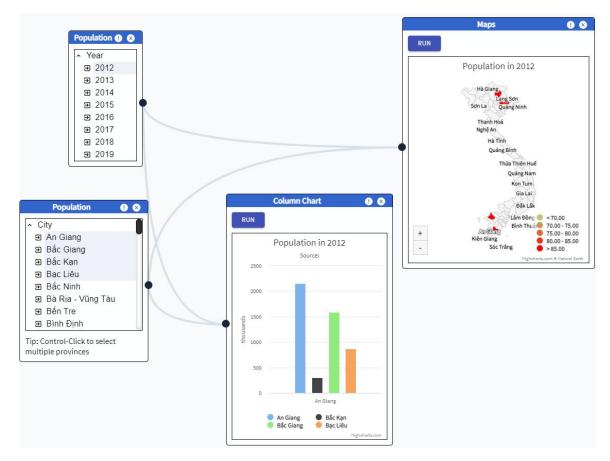
Maps



| | Maps | | | | | |
|-----|------------|------------------------|---------------|--------------------------------|--|--|
| No. | Field name | Туре | Require | Target | | |
| 1 | Maps | HighChart/Highma ps | Width: 350px; | Industry of VN 2012 to 2019 | | |

| | | | colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | |
|---|------------|--------|---|--------------------------|
| 2 | Port | button | Port in | |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", colorRange: | |
| 4 | Maps Title | | Default: "" Running: "Population of VN \${year}" | Population of VN 2012 |

Viz data Cities in year



| Cities In Year | | | | | | | | |
|----------------|------------|------------------------|--|------------------------------|--|--|--|--|
| No. | Field name | Туре | Require | Target | | | | |
| 1 | Maps | HighChart/Highma ps | Width: 350px; colorAxis: min: 50, minColor: "#E6E7E8", maxColor: "#005645", | Population of cities in year | | | | |
| 2 | Chart | Column | Width: 300px; | Population of cities in year | | | | |
| 3 | colorAxis | | Min: 0 minColor: b"rgb(197, 197, 115)", maxColor: "rgb(247, 2, 2)", | | | | | |

| | | • | Range: To 80 From 80 to 100 From 100 to 110 From 110 to 120 From 120 to 130 From 130 : color: #EEDD66 | |
|---|------------|----------------------------|---|--------------------|
| 4 | Maps Title | Defau Runnii \${year | ng: "Population in | Population in year |