

BLACKSWAN

The future of analytics we are building

Alan H Yue

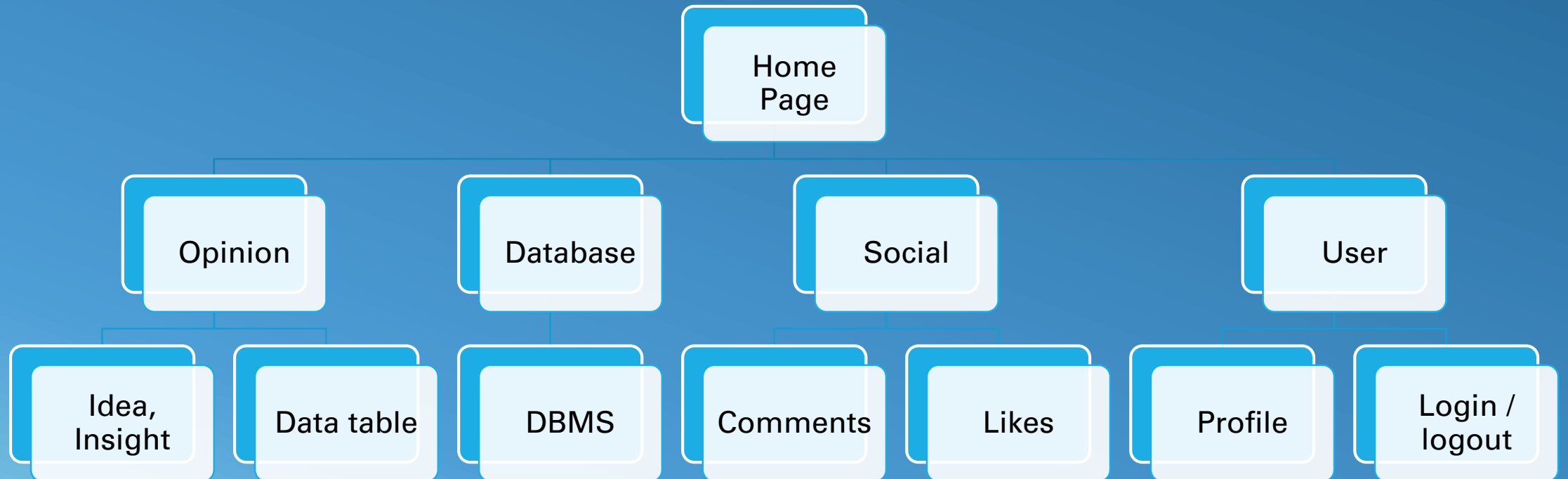
Updated: Nov 2019



Contents

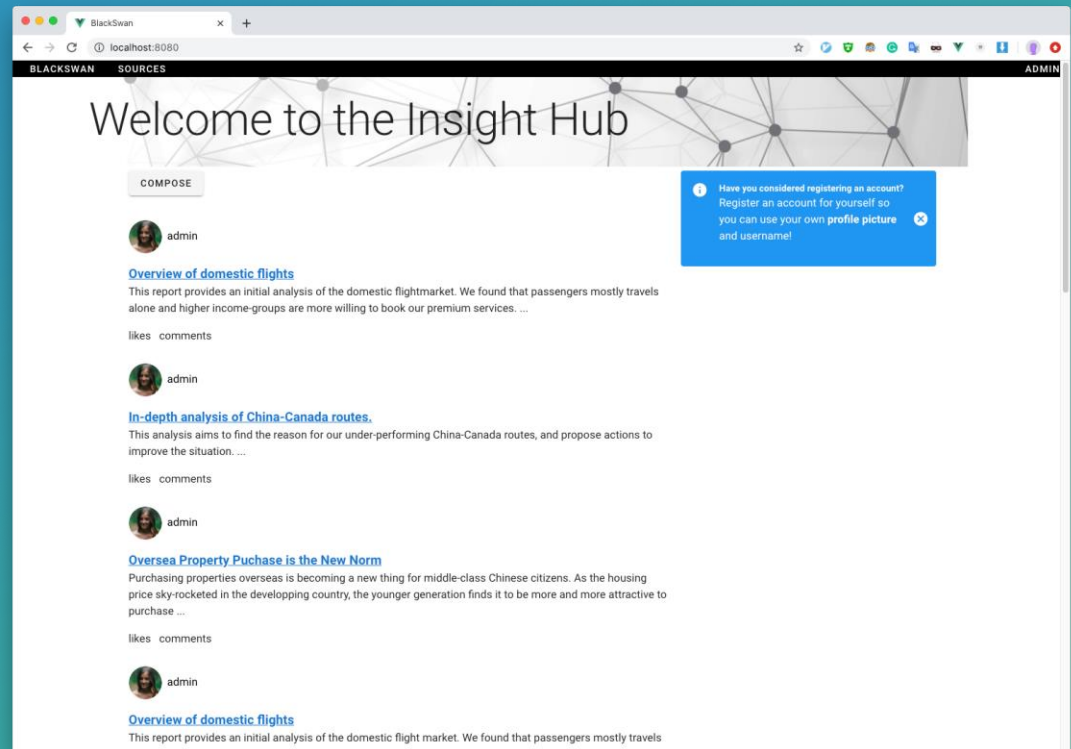
- Architecture Overview
- Design & Functionality
- Tech Stack

Architecture Overview



HOME PAGE

Easy digestion of
insights





Home Page - Components

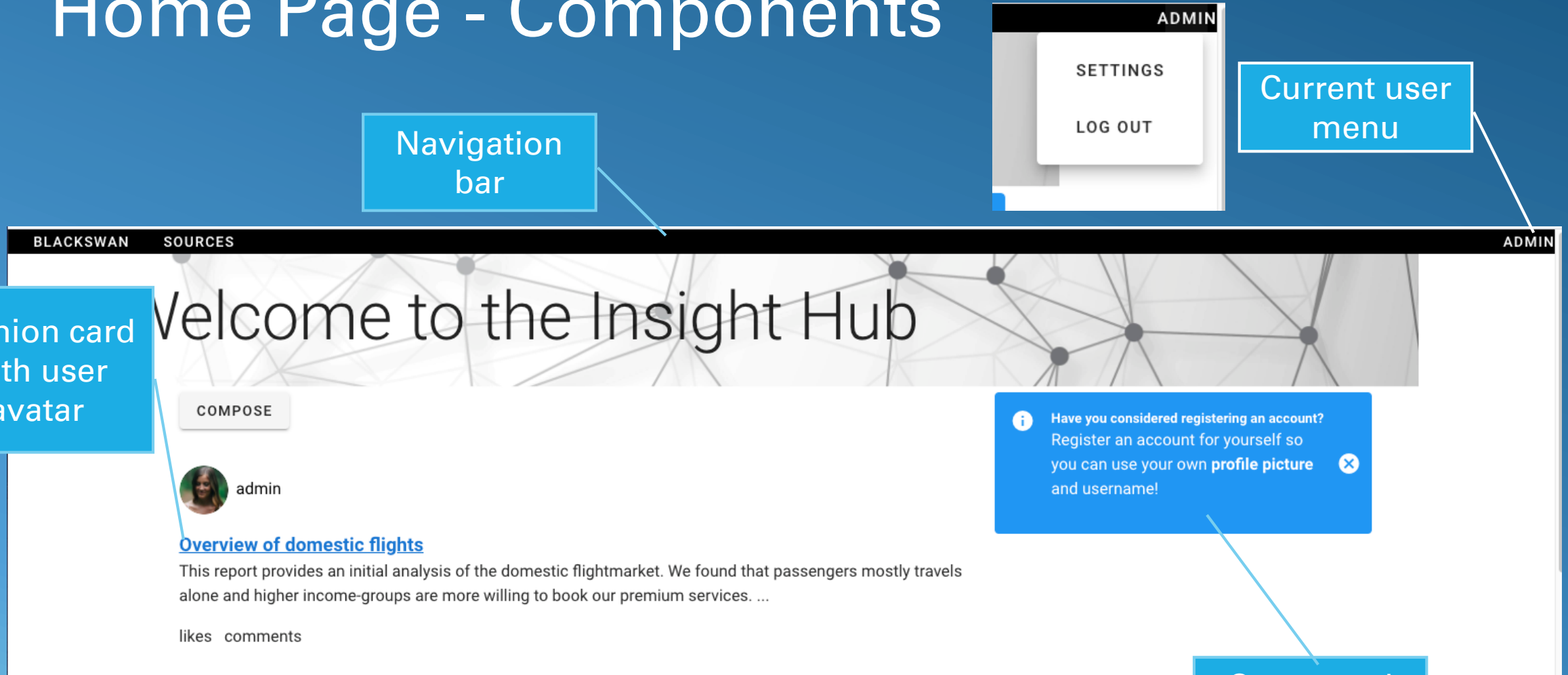
Navigation
bar

Current user
menu

Opinion card
with user
avatar

 Have you considered registering an account?
Register an account for yourself so
you can use your own **profile picture**
and username! 

Contextual
notifications



OPINION PAGE

Perfect mix of data
and interpretation.


BlackSwan

localhost:8080/opinions/12

BLACKSWAN SOURCES

ADMIN

Hotel booking analysis

 admin bases

Ref: <https://www.kaggle.com/jessemostipak/hotel-booking-demand> Note: This data set contains booking information for a city hotel and a resort hotel and includes information such as when the booking was made, length of stay, the number of adults, children, and/or babies, and the number of available parking spaces, among other things. All personally identifying information has from the data.

Dataset Overview

An overview of the dataset shows there are two types of hotels. Thus, subsequent analyses should be carried out individually for each type.

| HOTEL | # HOTEL |
|--------------|---------|
| City Hotel | 79330 |
| Resort Hotel | 40060 |

Rows per page: 10 1-2 of 2

City Hotel - Customer Type Analysis

"Transient" is the prevailing type of customers. "Group" customers are most profitable but their number is limited.

| CUSTOMER_TYPE | # HOTEL ↓ | tot ADULTS |
|-----------------|-----------|------------|
| Transient | 59404 | 112307 |
| Transient-Party | 17333 | 29655 |
| Contract | 2300 | 4363 |

Opinion Page - Components

Title, author,
and notes

The screenshot shows a web application interface for an opinion page. The browser address bar shows 'localhost:8080/opinions/12'. The page has a header with 'BLACKSWAN' and 'SOURCES' on the left, and 'ADMIN' on the right. The main content area is titled 'Hotel booking analysis' and includes a profile picture of 'admin' and a 'bases' link. Below this is a reference link and a note about the dataset. The 'Dataset Overview' section contains a paragraph and a table with two columns: 'HOTEL' and '# HOTEL'. The table lists 'City Hotel' with 79330 and 'Resort Hotel' with 40060. Below the table is a pagination control showing 'Rows per page: 10' and '1-2 of 2'. The 'City Hotel - Customer Type Analysis' section contains a paragraph and a table with three columns: 'CUSTOMER_TYPE', '# HOTEL ↓', and 'tot ADULTS'. The table lists 'Transient' (59404 hotels, 112307 adults), 'Transient-Party' (17333 hotels, 29655 adults), and 'Contract' (2300 hotels, 4363 adults).

Hotel booking analysis

admin bases

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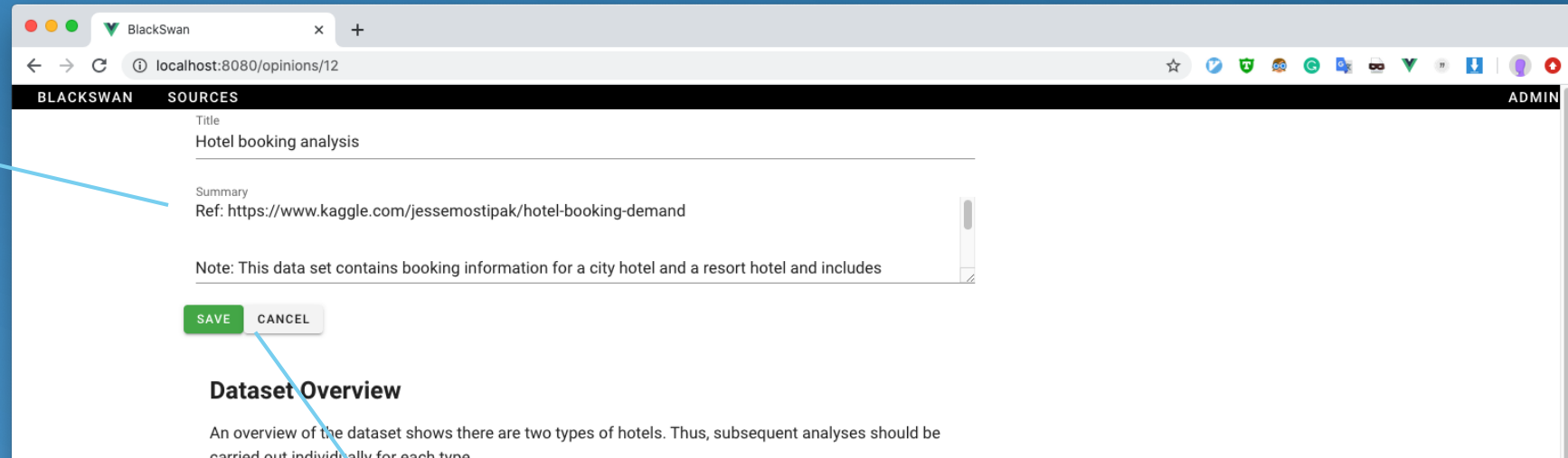
Analyst opinion
and data table

Another data
table

Opinion Page - Editing

Double click on title or note area to edit

Edit insight
title and
notes



The screenshot shows a web browser window with the URL `localhost:8080/opinions/12`. The page has a header with "BLACKSWAN" and "SOURCES" on the left, and "ADMIN" on the right. The main content area is titled "Title" and contains the text "Hotel booking analysis". Below this is a "Summary" section with the text "Ref: https://www.kaggle.com/jessemostipak/hotel-booking-demand". Further down is a "Note" section with the text "This data set contains booking information for a city hotel and a resort hotel and includes". At the bottom of the form are two buttons: "SAVE" (green) and "CANCEL" (grey). Below the form is a section titled "Dataset Overview" with the text "An overview of the dataset shows there are two types of hotels. Thus, subsequent analyses should be carried out individually for each type".

Save changes
on-the-fly with
RESTFuI API

DATA TABLE

Data-backed
insights

Dataset Overview

An overview of the dataset shows there are two types of hotels. Thus, subsequent analyses should be carried out individually for each type.

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Rows per page: 10 ▾ 1-2 of 2 < >

Data Table - Components

Title

Note

Table

Normal

Dataset Overview

An overview of the dataset shows there are two types of hotels. Thus, subsequent analyses should be carried out individually for each type.

| HOTEL | # HOTEL |
|------------|---------|
| City Hotel | 79330 |

Easily edit
contents

Save changes
on-the-fly

Title

Dataset Overview

1-2 of 2



Note

An overview of the dataset shows there are two types of hotels. Thus, subsequent analyses should be carried out individually for each type.

SAVE

CANCEL

HOTEL

HOTEL

City Hotel

79330

Resort Hotel

40060

Rows per page:

10

1-2 of 2



*Double-click on
title or note
area.*

Data Table - Visualization

Mouse hover the table

Action tabs

Dataset Overview

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Rows per page: 10 ▼

Dataset Overview

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Click on "Chart" to see visualization

Data Table – Editing Table

Edit table or
chart

Choose
dataset

Apply filters

Choose
groups and
metrics

Dataset Overview

An overview of the dataset shows there are two types of hotels. Thus, subsequent analyses should be carried out individually for each type.

TABLE CHART

Base

Hotel Booking

Filters
+

Group by

hotel

Values

hotel

count

 —

+

APPLY CANCEL

delete

Delete
table

Data Table – Editing Chart

Choose
show table
or chart by
default

Choose
values on X-
and Y-axis.

Choose to
use 100%
stacked bar
chart.

Dataset Overview

An overview of the dataset shows there are two types of hotels. Thus, subsequent analyses should be carried out individually for each type.

TABLE **CHART**

☐ Show chart

Group by

HOTEL

Values

HOTEL

☒ Stacked

APPLY

CANCEL



Tech Stack



Frontend

- VueJS
- Nuxt
- Vuetify



Backend

- Python
- Flask
- RESTful API



Database

- PostgreSQL
- SQLite
- SAS
- SQLAlchemy



Thanks for watching!

Feel free to ask for a live demo.