A COMPREHENSIVE ANALYSIS OF FINANCIAL PERFORMANCE:

INSIGHTS FROM A LEADING BANKS

Project submitted to Bharathiyar University in partial fulfilment of the requirements

for the award of the Degree of

B.Sc. MATHEMATICS

Submitted By

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ERODE – 638 004

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1.INTRODUCTION

1.1 Overview

The banking industry world-wide is being transformed.this session introduces the financial statements of banks and provides a traditional ratio-based procedure for analyzing bank financial performance using historical data .It demonstrates the banks & the banks are ordered on the basis oh their performance. Data are provided that compare the performance characteristics of small banks versus large banks and differentiate between high and low performs.

1.2 Purpose

A bank is a financial institution which is involved in borrowing and leading money. Banks plays an important role in the economy for offering a service for people wishing to save.
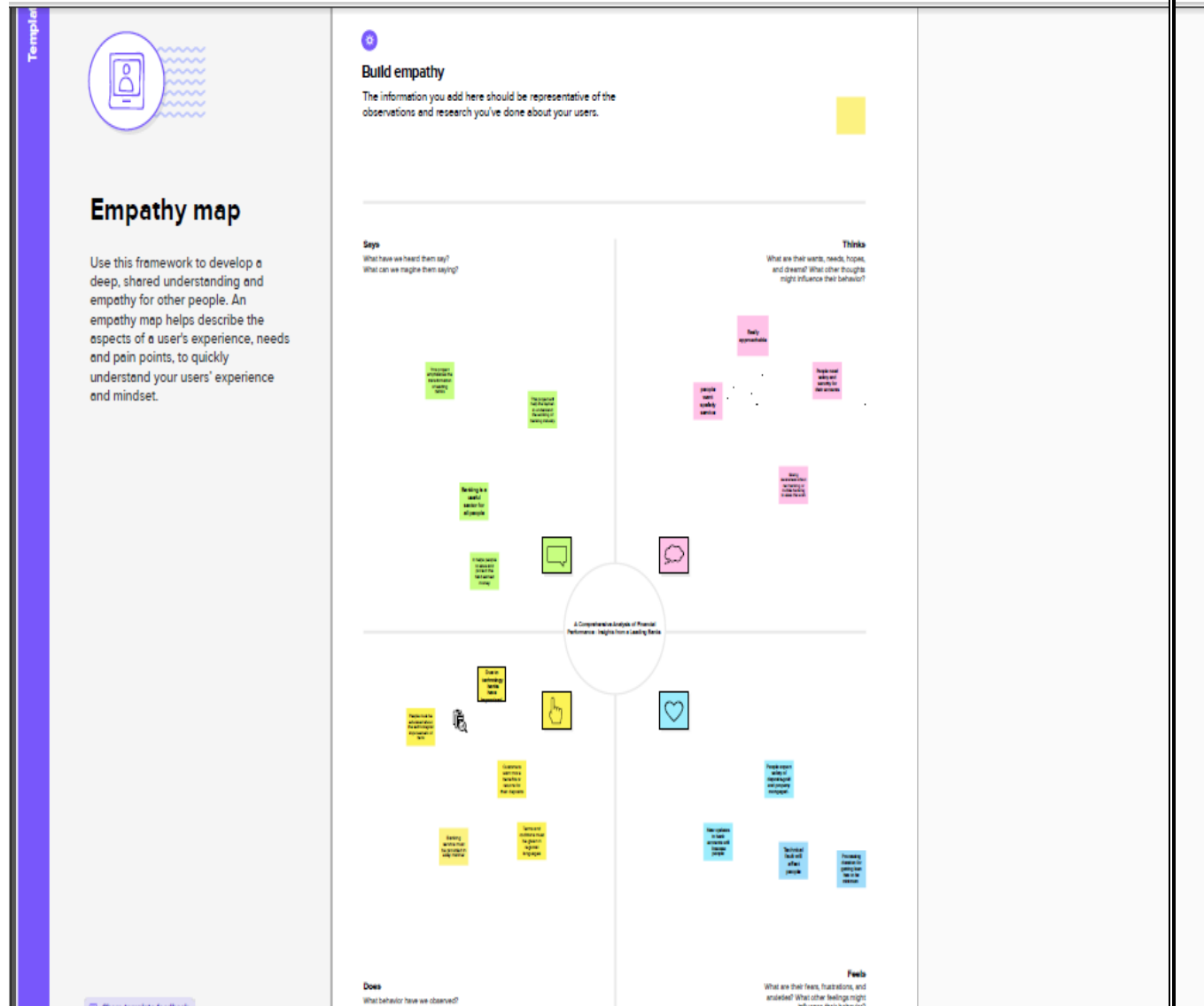
Through this project banks are ranked according to the data provided.Consequently, money is invested in the banks which other higher profit.

With the classification of banks, the lower bank is provided with the opportunities and modalities from the higher banks.
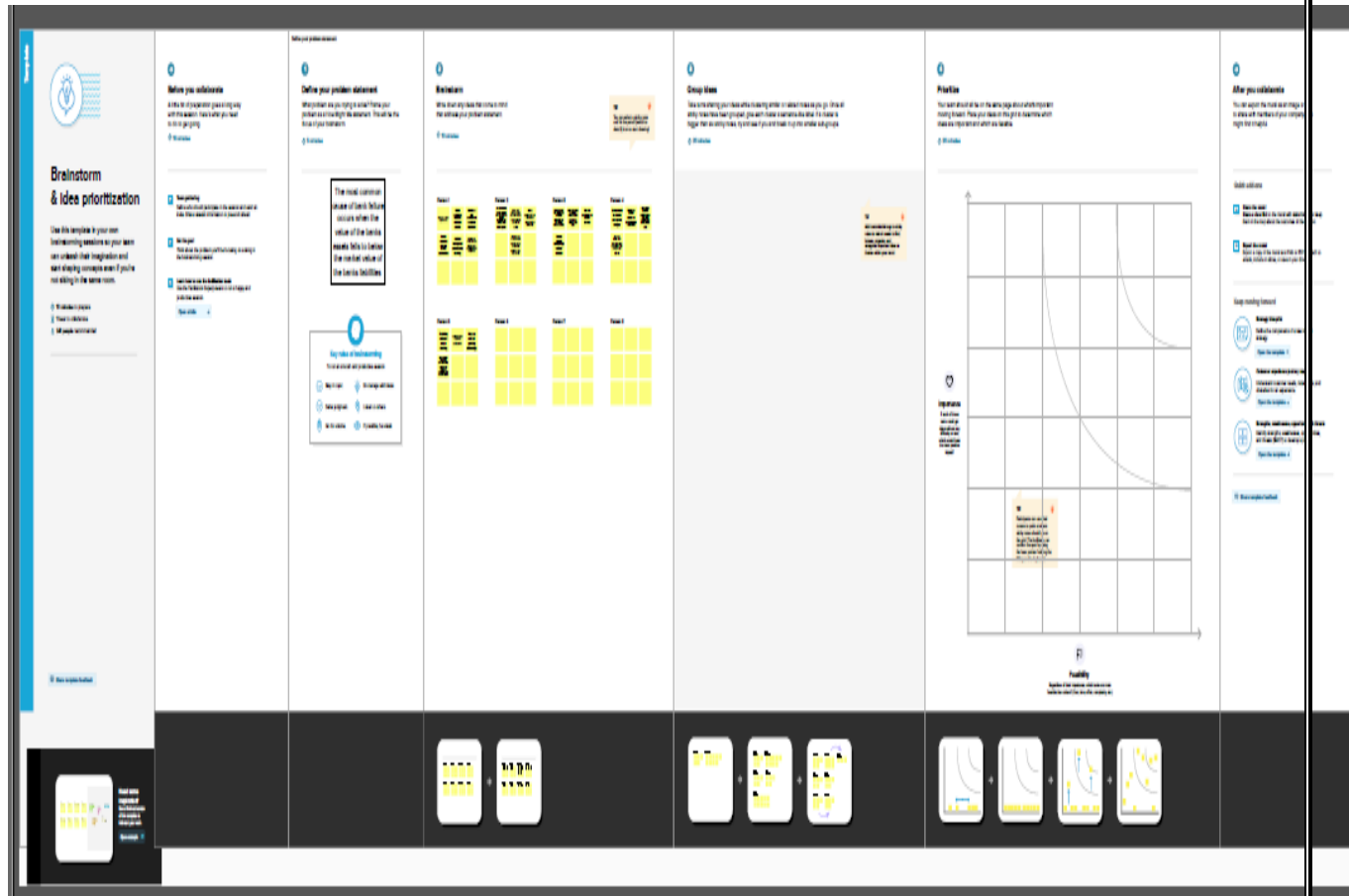
This project becomes useful as it enables the banks to enhance themselves and achieve the top most position.

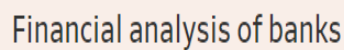## 1. PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map
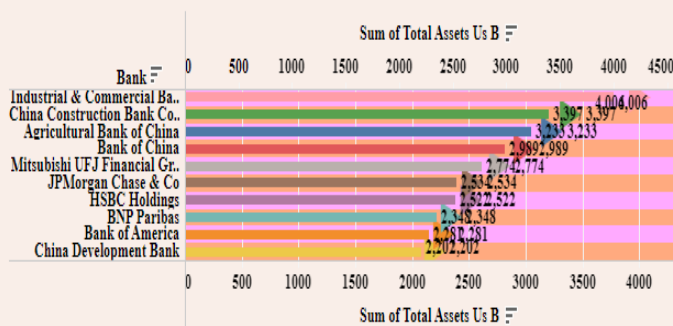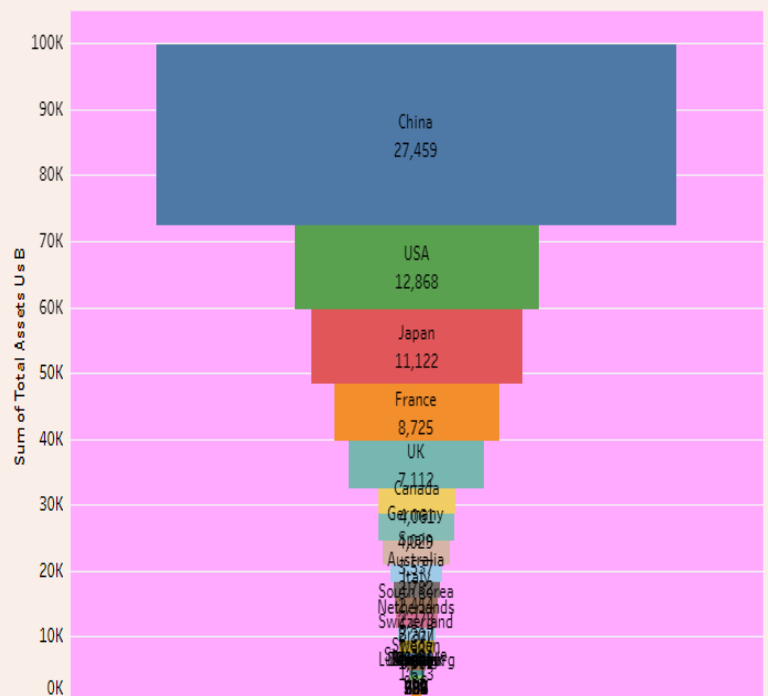
2.2 Ideation & Brainstorming Map

3. RESULT

Dashboard

Financial analysis of banks

Top banks according rank

Sum of Total Assets Us B

Bank	
Industrial & Commercial Ba..	4,004,006
China Construction Bank Co..	3,397 3,397
Agricultural Bank of China	3,233 3,233
Bank of China	2,989 2,989
Mitsubishi UFJ Financial Gr..	2,774 2,774
JPMorgan Chase & Co	2,534 2,534
HSBC Holdings	2,522 2,522
BNP Paribas	2,348 2,348
Bank of America	2,281 2,281
China Development Bank	2,202 2,202

Sum of Total Assets Us B

Word cloud to understand the assets of the banks

Barclays PLC Postal Savings Bank of China Deutsche Bank
Credit Agricole Group Bank of Communications Groupe BPCE
Sumitomo Mitsui Financial Group Bank of China Agricultural Bank of
Bank of America Industrial & Commercial Bank of China Mitsu
China Development Bank Japan Post Bank BNP Paribas China Co
HSBC Holdings JPMorgan Chase & Co Societe Generale Royal Bank of Canada
Lloyds Banking Group Citigroup Inc

Funnel chart to display the total assests of banks in a country

Sum of Total Assets Us B

- China 27,459
- USA 12,868
- Japan 11,122
- France 8,725
- UK 7,112
- Canada
- Germany
- Spain
- Australia
- Italy
- South Korea
- Netherlands
- Switzerland
- Sweden
- Luxembourg

tableau

Story

Story board

Sum of Total Assets Us B

Bank

Bank	Sum of Total Assets Us B
Industrial & Commercial Bank of China	4,006 4,006
China Construction Bank Corp	3,397 3,397
Agricultural Bank of China	3,233 3,233
Bank of China	2,989 2,989
Mitsubishi UFJ Financial Group	2,774 2,774
JPMorgan Chase & Co	2,534 2,534
HSBC Holdings	2,522 2,522
BNP Paribas	2,348 2,348
Bank of America	2,281 2,281
China Development Bank	2,202 2,202

Bank
- Agricultural Bank of C...
- Bank of America
- Bank of China
- BNP Paribas
- China Construction Ba...
- China Development Ba...
- HSBC Holdings
- Industrial & Commerc...
- JPMorgan Chase & Co
- Mitsubishi UFJ Financ...

Sum of Total Assets Us B

Web Application

4.ADVANTAGES & DISADVANTAGES

ADVANTAGES:

1. RISK MANAGEMENT

2. INVESTMENT DECISIONS

3. REGULATORY COMPLIANCE

1. RISK MANAGEMENT:

One of the main advantages of bank analysis is that it allows for effective risk management. By analyzing a bank's financial statements and performance metrics, analysts can identify potential risks and take steps to mitigate them. This can help banks avoid financial losses and maintain a healthy balance sheet.

2. INVESTMENT DECISIONS:

Bank analysis provides valuable information for investors who are considering investing in a particular bank. By analyzing a bank's financial statements and performance metrics, investors can make informed decisions about whether to invest in the bank and at what level.

3. REGULATORY COMPLIANCE:

Banks are subject to strict regulatory requirements, and bank analysis can help ensure that they are complying with these requirements. By monitoring a bank's financial performance and risk management practices, analysts can identify areas where the bank may be falling short and recommend corrective action.

DISADVANTAGES:

1. COMPLEX FINANCIAL STATEMENT

2. LIMITED INFORMATION

3. UNFORESEEN RISKS

4. LIMITED SCOPE

1. COMPLEX FINANCIAL STATEMENTS:

    Bank financial statements can be complex and difficult to analyze, especially for those who are not familiar with accounting and finance. This can make it challenging for analysts to interpret the information and draw accurate conclusions.

2. LIMITED INFORMATION:

    Banks are not always forthcoming with information, and may withhold or obscure certain data. This can make it difficult for analysts to get a complete picture of a bank's financial health and performance.

3. UNFORESEEN RISKS:

    Bank analysis can help identify potential risks, but it cannot predict all possible risks. Banks can face unforeseen risks, such as a sudden economic downturn or a cybersecurity breach, which can cause financial losses and damage their reputation.

4. LIMITED SCOPE:

    Bank analysis typically focuses on a bank's financial performance and risk management practices, but it may not consider broader issues such as the bank's social and environmental impact. This can limit the scope of analysis and overlook important factors that may be relevant to stakeholders.

5.APPLICATIONS

Bank analysis provides valuable insights into the financial health of banks , and these insights can be applied to a variety of areas.

Here are some of the areas where bank analysis solution can be applied:

The solution provided by bank analysis can be applied to a wide range of areas, including investment decision making , credit risk management , regulatory compliance , mergers and acquisitions , and risk management. By leveraging bank analysis solutions , stakeholders can make informed decisions about investment , lending ,and risk management.

6. CONCLUSIONS:

In conclusion ,a comprehensive analysis of financial performance is essential for understanding the strengths and weaknesses of leading banks . By identifying key performance indicators and assessing performance relative to
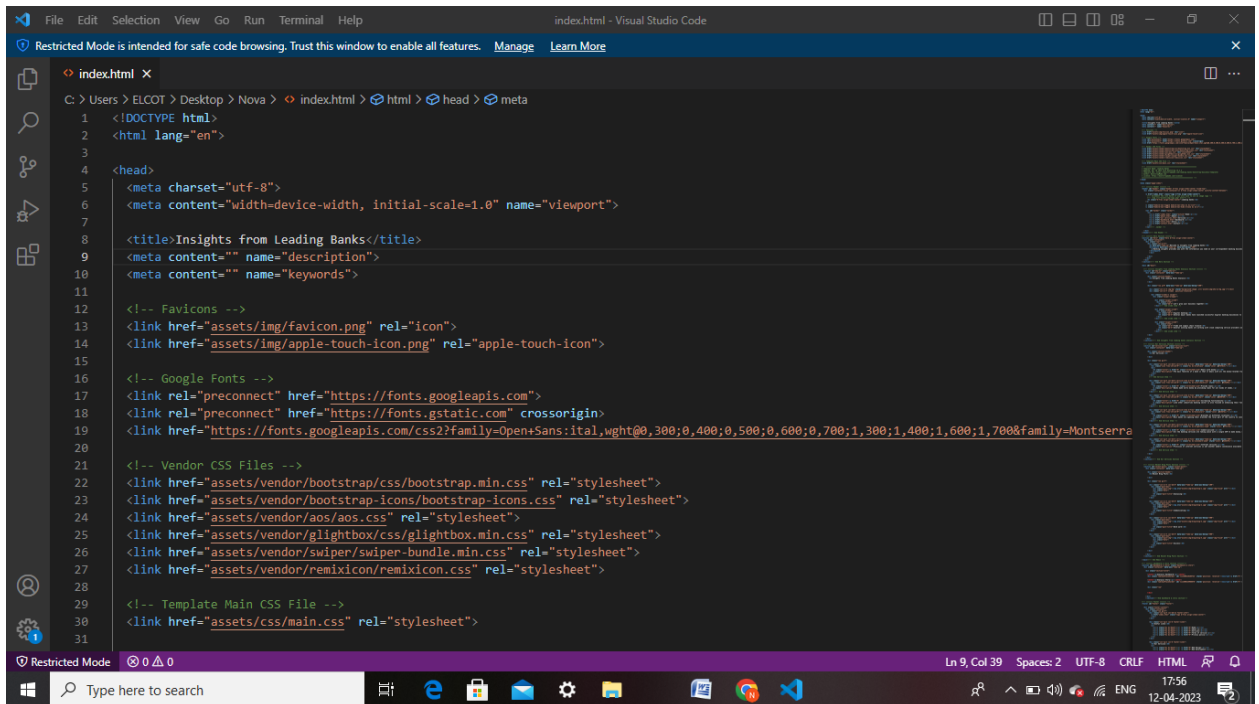
industry benchmarks , analysts can gain valuable insights into a bank's financial health and identify potential risks and opportunities.

7. FUTURE SCOPE:

The future scope of bank analysis is likely to becharacterized by agreater focus on data analytics , cybersecurity risk analysis, ESG analysis, real time monitoring, and the integration of non financial data. By embracing these trends, banks can improve their risk management, desion making, and overall financial performance.
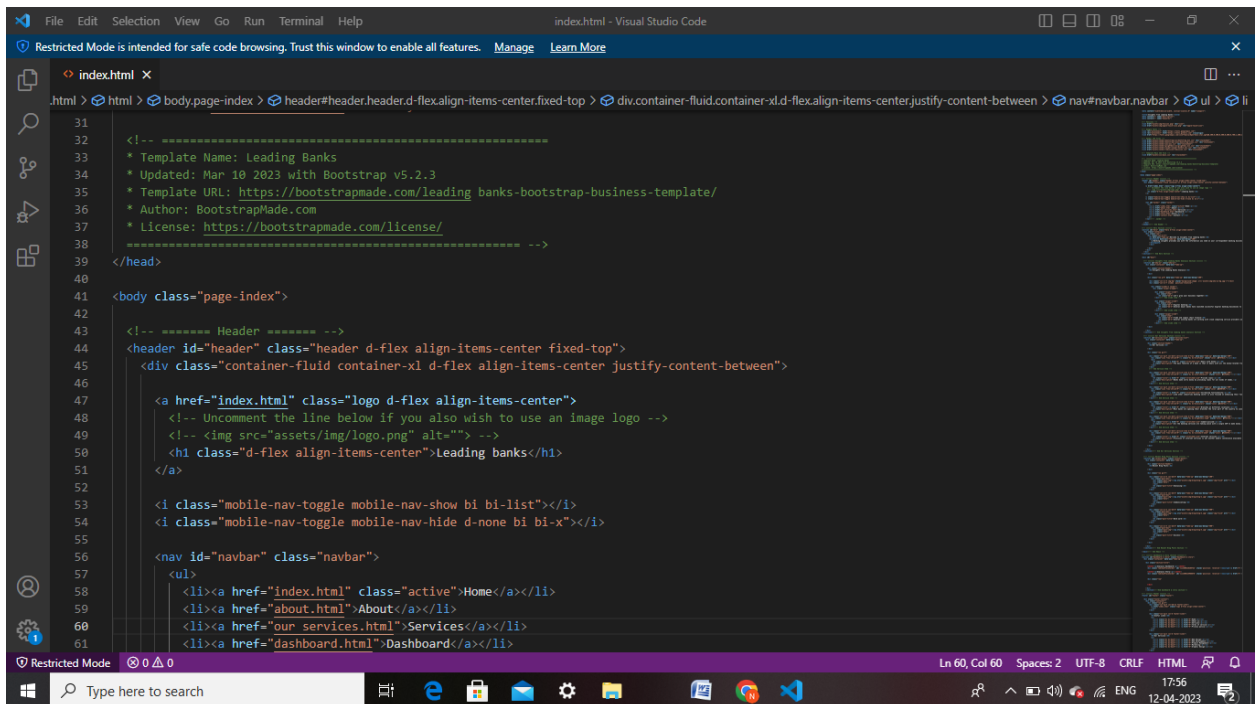
8. APPENDIX

A.Source code

```html
1  <!DOCTYPE html>
2  <html lang="en">
3
4  <head>
5    <meta charset="utf-8">
6    <meta content="width=device-width, initial-scale=1.0" name="viewport">
7
8    <title>Insights from Leading Banks</title>
9    <meta content="" name="description">
10   <meta content="" name="keywords">
11
12   <!-- Favicons -->
13   <link href="assets/img/favicon.png" rel="icon">
14   <link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">
15
16   <!-- Google Fonts -->
17   <link rel="preconnect" href="https://fonts.googleapis.com">
18   <link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
19   <link href="https://fonts.googleapis.com/css2?family=Open+Sans:ital,wght@0,300;0,400;0,500;0,600;0,700;1,300;1,400;1,600;1,700&family=Montserra
20
21   <!-- Vendor CSS Files -->
22   <link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
23   <link href="assets/vendor/bootstrap-icons/bootstrap-icons.css" rel="stylesheet">
24   <link href="assets/vendor/aos/aos.css" rel="stylesheet">
25   <link href="assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">
26   <link href="assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">
27   <link href="assets/vendor/remixicon/remixicon.css" rel="stylesheet">
28
29   <!-- Template Main CSS File -->
30   <link href="assets/css/main.css" rel="stylesheet">
31
```

```html
31
32   <!-- ======================================================
33   * Template Name: Leading Banks
34   * Updated: Mar 10 2023 with Bootstrap v5.2.3
35   * Template URL: https://bootstrapmade.com/leading_banks-bootstrap-business-template/
36   * Author: BootstrapMade.com
37   * License: https://bootstrapmade.com/license/
38   ====================================================== -->
39   </head>
40
41   <body class="page-index">
42
43   <!-- ======= Header ======= -->
44   <header id="header" class="header d-flex align-items-center fixed-top">
45     <div class="container-fluid container-xl d-flex align-items-center justify-content-between">
46
47       <a href="index.html" class="logo d-flex align-items-center">
48         <!-- Uncomment the line below if you also wish to use an image logo -->
49         <!-- <img src="assets/img/logo.png" alt=""> -->
50         <h1 class="d-flex align-items-center">Leading banks</h1>
51       </a>
52
53       <i class="mobile-nav-toggle mobile-nav-show bi bi-list"></i>
54       <i class="mobile-nav-toggle mobile-nav-hide d-none bi bi-x"></i>
55
56       <nav id="navbar" class="navbar">
57         <ul>
58           <li><a href="index.html" class="active">Home</a></li>
59           <li><a href="about.html">About</a></li>
60           <li><a href="our_services.html">Services</a></li>
61           <li><a href="dashboard.html">Dashboard</a></li>
```

index.html ✕

C: > Users > ELCOT > Desktop > Nova > ◇ index.html > ◈ html > ◈ body.page-index > ◈ main#main > ◈ section#why-us.why-us > ◈ div.container

```html
61              <li><a href="dashboard.html">Dashboard</a></li>
62              <li><a href="story.html">Story</a></li>
63              <li><a href="contact.html">Contact</a></li>
64          </ul>
65        </nav><!-- .navbar -->
66
67      </div>
68    </header><!-- End Header -->
69
70    <!-- ======= Hero Section ======= -->
71    <section id="hero" class="hero d-flex align-items-center">
72      <div class="container">
73        <div class="row">
74          <div class="col-xl-4">
75            <h2 data-aos="fade-up">Welcome to Insights from leading banks</h2>
76            <blockquote data-aos="fade-up" data-aos-delay="100">
77              <p>Banking insights provides you with the information you need on your correspondent banking business.Our intermediate insights into
78            </blockquote>
79          </div>
80
81        </div>
82      </div>
83    </div>
84  </section><!-- End Hero Section -->
85
86  <main id="main">
87
88    <!-- ======= Insights from Leading Banks Analysis Section ======= -->
89    <section id="why-us" class="why-us">
90      <div class="container" data-aos="fade-up">
91
```

Restricted Mode   ⊗ 0 ⚠ 0   Ln 90, Col 49   Spaces: 2   UTF-8   CRLF   HTML

---

index.html ✕

in > ◈ section#why-us.why-us > ◈ div.container > ◈ div.row.g-0 > ◈ div.col-xl-7.slides.position-relative > ◈ div.slides-1.swiper > ◈ div.swiper-wrapper > ◈ div.swiper-slide > ◈ div.swiper-slide > ◈ div.item > ◈ h4.mb-3

```html
91
92          <div class="section-header">
93            <h2>Insights from Leading Banks Analysis</h2>
94
95          </div>
96
97          <div class="row g-0" data-aos="fade-up" data-aos-delay="200">
98
99            <div class="col-xl-5 img-bg" style="background-image: url('assets/img/why-us-bg.jpg')"></div>
100           <div class="col-xl-7 slides  position-relative">
101
102             <div class="slides-1 swiper">
103               <div class="swiper-wrapper">
104
105                 <div class="swiper-slide">
106                   <div class="item">
107                     <h3 class="mb-3">Let's grow your business together</h3>
108                   </div><!-- End slide item -->
109
110                 <div class="swiper-slide">
111                   <div class="item">
112                     <h3 class="mb-3">Digital banking</h3>
113                     <h4 class="mb-3">Several major banks have launched successful digital banking businesses to compete with an arrayof fast grow
114                   </div>
115                 </div><!-- End slide item -->
116
117                 <div class="swiper-slide">
118                   <div class="item">
119                     <h3 class="mb-3">Trade and supply chain finance</h3>
120                     <h4 class="mb-3">Several winning banks are working with cloud computing service providers and fintech firms to offer small bu
121                   </div>
```

Restricted Mode   ⊗ 0 ⚠ 0   Ln 120, Col 49   Spaces: 2   UTF-8   CRLF   HTML

Screenshot 1 (index.html - Visual Studio Code):

```
122              </div><!-- End slide item -->
123
124        </div>
125
126      </div>
127    </section><!-- End Insights from leading banks analysis Section -->
128
129    <!-- ======= Our Services Section ======= -->
130    <section id="services-list" class="services-list">
131      <div class="container" data-aos="fade-up">
132
133        <div class="section-header">
134          <h2>Our Services</h2>
135
136        </div>
137
138        <div class="row gy-5">
139
140          <div class="col-lg-4 col-md-6 service-item d-flex" data-aos="fade-up" data-aos-delay="100">
141            <div class="icon flex-shrink-0"><i class="bi bi-briefcase" style="color: #f57813;"></i></div>
142            <div>
143              <h4 class="title"><a href="#" class="stretched-link">Deals with money</a></h4>
144              <p class="description">The main features of a bank is that it deals with all the money-related transactions.</p>
145            </div>
146          </div>
147          <!-- End Service Item -->
148
149          <div class="col-lg-4 col-md-6 service-item d-flex" data-aos="fade-up" data-aos-delay="200">
150            <div class="icon flex-shrink-0"><i class="bi bi-card-checklist" style="color: #15a04a;"></i></div>
151            <div>
152              <h4 class="title"><a href="#" class="stretched-link">Provide loans</a></h4>
```

Screenshot 2 (index.html - Visual Studio Code):

```
153              <p class="description">Banks make extra money by providing loans for all kinds of needs.</p>
154            </div>
155          </div><!-- End Service Item -->
156
157          <div class="col-lg-4 col-md-6 service-item d-flex" data-aos="fade-up" data-aos-delay="300">
158            <div class="icon flex-shrink-0"><i class="bi bi-bar-chart" style="color: #d90769;"></i></div>
159            <div>
160              <h4 class="title"><a href="#" class="stretched-link">Increasing functionality</a></h4>
161              <p class="description">Like other industries banking sector is also focused on enhancing their functionality.</p>
162            </div>
163          </div><!-- End Service Item -->
164
165          <div class="col-lg-4 col-md-6 service-item d-flex" data-aos="fade-up" data-aos-delay="400">
166            <div class="icon flex-shrink-0"><i class="bi bi-binoculars" style="color: #15bfbc;"></i></div>
167            <div>
168              <h4 class="title"><a href="#" class="stretched-link">Branches at different locations</a></h4>
169              <p class="description">Most banks are opening their branches the rural part of the country to connect people with the banks and to
170            </div>
171          </div><!-- End Service Item -->
172
173          <div class="col-lg-4 col-md-6 service-item d-flex" data-aos="fade-up" data-aos-delay="500">
174            <div class="icon flex-shrink-0"><i class="bi bi-brightness-high" style="color: #f5cf13;"></i></div>
175            <div>
176              <h4 class="title"><a href="#" class="stretched-link">Commercialized</a></h4>
177              <p class="description">All the banking services are taking place with a single AIM to make money.</p>
178            </div>
179          </div><!-- End Service Item -->
180
181          <div class="col-lg-4 col-md-6 service-item d-flex" data-aos="fade-up" data-aos-delay="600">
182            <div class="icon flex-shrink-0"><i class="bi bi-calendar4-week" style="color: #1335f5;"></i></div>
183            <div>
```

index.html ✕

C: > Users > ELCOT > Desktop > Nova > ◇ index.html > ⬡ html > ⬡ body.page-index > ⬡ main#main > ⬡ section#recent-posts.recent-posts > ⬡ div.container > ⬡ div.row.gy-5 > ⬡ div.col-xl-3.col-md-6

```html
184                    <h4 class="title"><a href="#" class="stretched-link">Internet services</a></h4>
185                    <p class="description">Provision of internet services is yet another modern convenience available at all banking sector.</p>
186                  </div>
187                </div><!-- End Service Item -->
188
189              </div>
190
191            </div>
192          </section><!-- End Our Services Section -->
193
194
195          <!-- ======= Recent Blog Posts Section ======= -->
196          <section id="recent-posts" class="recent-posts">
197            <div class="container" data-aos="fade-up">
198
199              <div class="section-header">
200                <h2>Recent Blog Posts</h2>
201
202              </div>
203
204              <div class="row gy-5">
205
206                <div class="col-xl-3 col-md-6" data-aos="fade-up" data-aos-delay="100">
207                  <div class="post-box">
208                    <div class="post-img"><img src="assets/img/blog/blog-1.jpg" class="img-fluid" alt=""></div>
209                    <div class="meta">
210                    </div>
211                    <h3 class="post-title">Analysing</h3>
212                  </div>
213                </div>
214
```

Ln 213, Col 17   Spaces: 2   UTF-8   CRLF   HTML

C: > Users > ELCOT > Desktop > Nova > ◇ index.html > ⬡ html > ⬡ body.page-index > ⬡ main#main > ⬡ section#recent-posts.recent-posts > ⬡ div.container

```html
215                <div class="col-xl-3 col-md-6" data-aos="fade-up" data-aos-delay="200">
216                  <div class="post-box">
217                    <div class="post-img"><img src="assets/img/blog/blog-2.jpg" class="img-fluid" alt=""></div>
218                    <div class="meta">
219                    </div>
220                    <h3 class="post-title">Communicating</h3>
221                  </div>
222                </div>
223
224                <div class="col-xl-3 col-md-6" data-aos="fade-up" data-aos-delay="300">
225                  <div class="post-box">
226                    <div class="post-img"><img src="assets/img/blog/blog-3.jpg" class="img-fluid" alt=""></div>
227                    <div class="meta">
228                    </div>
229                    <h3 class="post-title">Hard work</h3>
230                  </div>
231                </div>
232
233                <div class="col-xl-3 col-md-6" data-aos="fade-up" data-aos-delay="400">
234                  <div class="post-box">
235                    <div class="post-img"><img src="assets/img/blog/blog-4.jpg" class="img-fluid" alt=""></div>
236                    <div class="meta">
237                    </div>
238                    <h3 class="post-title">Success</h3>
239                  </div>
240                </div>
241
242              </div>
243
244            </div>
245          </section><!-- End Recent Blog Posts Section -->
```

Ln 244, Col 13   Spaces: 2   UTF-8   CRLF   HTML

Thank You