



CSM Project

Title:

Smart Contact Manager

Presented by:

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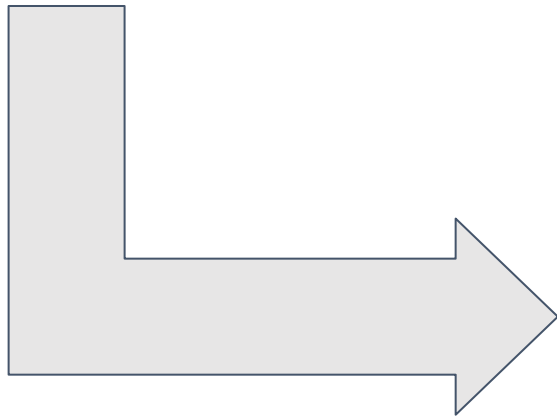
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- The Contact Management System is a software designed to streamline contact management and overcome the challenges of manual systems.
- It is user-friendly and provides error-free data entry with error messages for invalid data.
- The system offers advanced search capabilities, customizable reporting, and analytics to help organizations make informed decisions.
- It is adaptable to different contact needs and comes with remote access features for busy executives.
- The Contact Management System is an essential tool for individuals and organizations looking to stay organized, streamline communication, and focus on core business activities.

Problem Statement

The problem of inefficiency and disorganization associated with manual or outdated contact management methods and the difficulty in keeping track of contact information across multiple platforms, leading to missed opportunities, miscommunications, and loss of important information.



Designing a smart contact management system that simplifies contact management, boosts communication, and enhances productivity while also providing a user-friendly interface and ensuring data security and privacy is a complex task. How can we develop a system that meets all these requirements and effectively addresses the challenges of modern contact management?

Motivation of Project

1. The motivation behind developing a smart contact manager was to address the challenges of managing contact information in today's digital age. With the increasing number of communication channels available, managing contacts has become more complex than ever. People are using multiple devices and applications to communicate, and keeping all the contact information updated and organized can be a daunting task.
2. Smart contact managers were developed to simplify this process by providing an efficient solution for storing, retrieving, and updating contact details. These applications incorporate advanced features such as AI-powered data processing, natural language search, and contact synchronization with various devices and applications, making it easy to manage contact information across multiple platforms.
3. Moreover, smart contact managers help individuals and businesses stay organized and productive by reducing the time and effort required to manage contact information. With a smart contact manager, users can easily search for and retrieve contact information, synchronize their contacts across devices, and manage their contacts in groups.
4. Developing a smart contact manager was to simplify the process of managing contact information and improve productivity in a world where communication channels are constantly evolving. By providing a comprehensive and easy-to-use solution, smart contact managers have become an essential tool for individuals and organizations looking to stay organized and productive.

Organization Structure of Project

1. **User Interface:** The user interface is the primary means by which users interact with the system. It includes all of the menus, screens, and controls that allow users to manage their contacts.
2. **Contact Database:** The contact database is the central repository for all contact information. It stores all of the contact details entered by the user, such as name, phone number, email address, and physical address.
3. **Search and Filter Tools:** The search and filter tools allow users to quickly find the contacts they need. Users can search for contacts by name, phone number, email address, or any other data field stored in the contact database.
4. **Addition & View contact:** It also allows users to add and view their contacts easily. Users can add new contacts manually & this information is saved and can be viewed later on. Users can view their contact details in a single location. The contact details may include their name, work, phone number, email address, and other relevant information. Users can also add custom fields to the contact details to store additional information that may be relevant to their business needs.
5. **Security of Information:** The Smart Contact Management System includes several security features to ensure the safety and confidentiality of contact data. User authentication is a crucial security feature that requires users to log in using their unique username and password. The system also includes role-based access control, which limits access to specific data based on the user's role or permission level.

Literature Review

- Smart contact managers are software programs that use artificial intelligence to help individuals and organizations manage their relationships and contacts.
- The benefits of using smart contact managers include time savings, increased productivity, and better customer relationship management.
- Key features of smart contact managers include contact organization, task automation, communication history, contact search, and analytics.
- Smart contact managers have a wide range of use cases, including sales, HR, event planning, and executive networking.
- Overall, smart contact managers are a valuable tool for anyone looking to manage their contacts effectively and efficiently.

Author	Year	Proposed Technique	Parameter	Tools Used	Results
Donath, J., Karahalios, K., & Viegas, F.	1999	Pattern recognition and message reading algorithms	Loom visualizations, visualizing the messages, create and classify each of the contact, automatic text classification	One programming language, UI/UX interface, JavaScript,HTML, CSS	More efficiency, better organization, more communication
Erickson, T.	1999	Agile methodologies, data model, user interaction	UI, user usability,features,	Programming language	Better organization, better data management
Zhiheng Zhao, Ray Y. Zhong, Yong-Hong Kuo, Yelin Fu, G.Q. Huang	2021	novel cyber-physical architecture for spatial temporal analytics	UI, Security, performance, support, integration	Programming language, UI/UX, JS, HTML, CSS, Cloud Platform, Database	More efficiency, more communication, scalability, performance
Millen, D. and Henderson, D.	2000	IP-based telephony control	Control and monitoring of an ISDN desktop phone from a local PC and remotely from the web	Java, MySQL, JS, HTML, CSS	More efficiency, better organization, more communication, better data management, increased productivity

Objectives

The objectives of a smart contact manager are to help individuals or businesses efficiently manage their contacts, streamline communication, and build stronger relationships with their contacts. Some specific objectives of a smart contact manager may include:

- A Centralized User-Friendly Contact Management system which provides a single location for storing and managing all contact information including names, phone numbers, email addresses, work profile, and other details. We can perform the CRUD Operations(Create, Read, Update, Delete) on the added contact details.
- A 2-step verification for each user provides security & privacy. Each user has a different dashboard to work-on & manage the contacts(No 2 users can interact). The user credentials are being saved in the MySql workbench at the backend.
- This SpringBoot Application is deployed using Docker.

By achieving these objectives, a smart contact manager can help businesses build stronger relationships with their contacts, increase customer retention, and ultimately drive revenue growth.

Technology Stack

- Spring Boot (IDE)
- Java
- MYSQL to manage database
- Docker for Deployment
- Git(version control)
- HTML
- CSS

Methodology

- We started from zero and built a web application using HTML, CSS, JavaScript, Java, Spring Boot framework, with MySQL serving as the database. To manage the mobile, phone, person, and address information is the primary goal of the Springboot - maven based project on Smart Contact Contact Management System.
- Only the administrator has assured access because the Project is entirely constructed at the administrative end. To organize, collaborate, and synchronize health, work, lifestyle, and other details, advanced contact managers are also known as individual resource management (IRM) tools. IRM tools are systems for managing an individual's interactions with present and future contacts.
- The first step is to create a sign-up/sign-in on our website. The user will need to input information like name, email, password, and a brief description of themselves on this page. Data inputted by the user after registration is now stored in our data center which for this project is a MySQL Server.
- The user who logged in has the specific data and he/she can add contacts or any information that needs to be saved. The material is organized into categories based on needs and priorities. Data that has been saved can easily be modified, deleted, or updated as needed by the user. Once this process is finished, the contacts that were saved can be retrieved whenever and wherever necessary.
- The main goal of this project is to organize messages, follow-ups, reminders, and all other sensitive and essential information so that the user doesn't miss anything crucial.

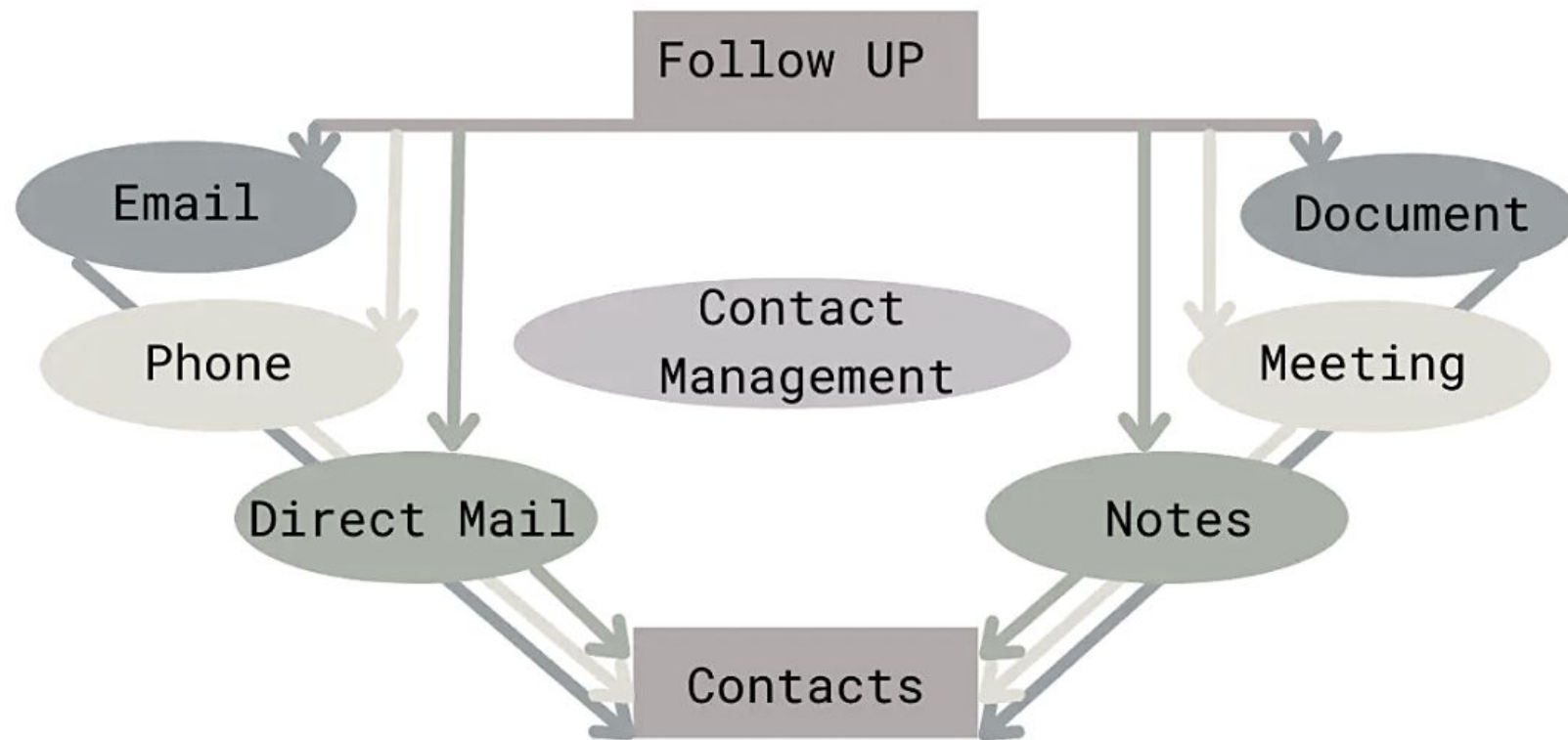


Fig. 1- Contact Management System

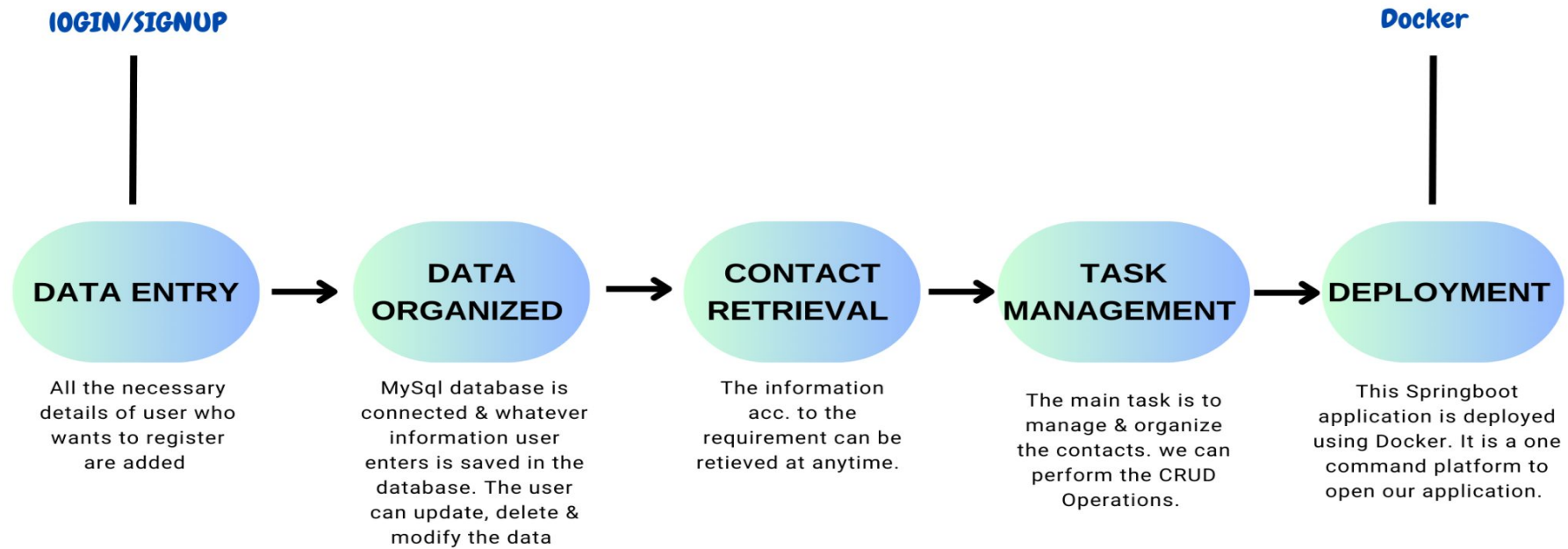


Fig. 2- Methodology Diagram

IMPLEMENTATION OF PROJECT

Hola Amigos!

Bienvenue

Welcome to Smart Contact Manager. This website will introduce you to the amazing and kind universe. Our website will assist you with inserting, deleting, updating, and a lot more using it. We will send you reminders to help you accomplish your goals and will assist you in setting reminders. You are safe with us! We stand by you!

Thank you for choosing us!

Merci de nous avoir choisi!

Gracias por elegirnos!

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Smart Contact Manager

HOMEABOUTLOGINSIGNUP

Login

Username:


Password:


Remember me ☐

submit

Forgot Password ?

Register here

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Mostly cloudy




ENG
IN

23:48
22-03-2023

3

Smart Contact Manager

HOME ABOUT LOGIN SIGNUP



Register Here !!

Your Name

Ram Sharma

Your Email

test@gmail.com

Your Password

.....

I am a normal user. Learning springboot.

☒ Accept terms and conditions

Submit

Reset

MySQL Workbench

Local instance MySQL - Warn...

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHMAS

Filter objects

Indexes

Foreign Keys

Triggers

hibernate_sequence

user

Views

Stored Procedures

Administration Schemas

Information

Table: **user**

Columns:

id

about

email

enabled

image_url

name

password

role

int(11) PK

varchar(500)

varchar(255)

bit(1)

varchar(255)

varchar(20)

varchar(255)

varchar(255)

hibernate_sequence

user

contact

user

user

contact

user

user

Limit to 1000 rows

1 • `SELECT * FROM contacts.user;`

Result Grid

Filter Rows:

Edit:

Export/Import:

Wrap Cell Content:

Result Grid

Form Editor

	id	about	email	enabled	image_url	name
▶	1	whgrwhrwi am programmer	b.chaudhary12102@gmail.com	1	default.png	Bhoomika Chaudhar
	2	gftu462ytu	500083727@stu.upes.ac.in	1	default.png	Bhoomika Chaudhar
	3	learning springboot	bhoomikachaudhary@gmail.com	1	default.png	Bhoomika
	4	I am a normal user. Learning springboot.	test@gmail.com	1	default.png	Ram Sharma
•	NULL	NULL	NULL	NULL	NULL	NULL

user 1 ×

Apply

Revert

Context Help

Snippets

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	22:40:20	SELECT * FROM contacts.contact LIMIT 0, 1000	0 row(s) returned	0.000 sec / 0.000 sec
✓ 2	22:40:27	SELECT * FROM contacts.user LIMIT 0, 1000	2 row(s) returned	0.000 sec / 0.000 sec
✓ 3	23:39:45	SELECT * FROM contacts.user LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Browser tabs: CLOUD SECURITY & MANAGEM... | CSM Project .pptx - Google Slide | User Dashboard

Address bar: localhost:8080/user/index

Smart Contact Manager

HOME RAM SHARMA LOGOUT

Home

View Contacts

Add Contact

Your Profile

Settings

Logout

Start Adding your contact on cloud...

ADD NEW CONTACT

Donate Us

Windows taskbar: Type here to search, Earnings upcoming, 00:37 21-04-2023

Cloud Security & Management

CSM Project .pptx - Google Slide

Show User Contacts

localhost:8080/user/show-contacts/0

Import favouritesYouTubeMapsGmailUntitled design - Vi...Reshape buying for...Booking.comContinuous integra...Other favourites

Smart Contact Manager

HOME RAM SHARMA LOGOUT

Home

View Contacts

Add Contact


Your Profile

Settings

Logout

Your Contacts

Search your contacts

#ID	Name	Email	Phone	Action
SCMUSER7	 Bhoomika	chaudharybhoomika12@gmail.com	9996881933	<div>Delete</div> <div>Update</div>

1



Type here to search

20°C Light rain


00:39

21-04-2023


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CLOUD SECURITY & MANAGEM

















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Profile Page

localhost:8080/user/profile

 Import favourites
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  Maps
  Gmail
  Untitled design - Vi...
  Reshape buying for...
  Booking.com
  Continuous integra...

Other favourites



Smart Contact Manager

HOME RAM SHARMA LOGOUT

×

Home

View Contacts


Add Contact

Your Profile

Settings








Logout

☰






Ram Sharma

#USERID	SCMUSER6
Email	test@gmail.com
Role	ROLE_USER
Account Active	true
About you	I am a normal user. Learning springboot



















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






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ENG

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21-04-2023

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CLOUD SECURITY & MANAGEM

CSM Project .pptx - Google Slide

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📺 YouTube

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📄 Gmail

🌀 Untitled design - Vi...

📄 Reshape buying for...

📄 Booking.com

🖥 Continuous integra...

📁 Other favourites

Smart Contact Manager

HOME RAM SHARMA LOGOUT

🏠 Home

👤 View Contacts

✎ Add Contact

👤 Your Profile

⚙ Settings

🚪 Logout

Change password

Change

Reset

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21-04-2023

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DEPLOYMENT USING DOCKER

CSM PROJECT - smartcontactmanager/Dockerfile - Spring Tool Suite 4

File Edit Source Navigate Search Project Run Window Help

Package Explorer

smartcontactmanager [boot] [devtools]

src/main/java

com.smart

SmartcontactmanagerApplication.java

com.smart.config

com.smart.controller

com.smart.dao

com.smart.entities

com.smart.helper

com.smart.service

src/main/resources

src/test/java

JRE System Library [JavaSE-11]

Maven Dependencies

target/generated-sources/annotations

target/generated-test-sources/test-annotations

src

target

Dockerfile

HELP.md

application.properties

SmartcontactmanagerApplication.java

Dockerfile

Outline

FROM

EXPOSE

ADD

ENTRYPOINT

FROM openjdk:11

EXPOSE 8080

ADD target/spring-boot-docker.jar spring-boot-docker.jar

ENTRYPOINT ["java", "-jar", "/spring-boot-docker.jar"]

Boot Dashboard

Type tags, projects, or working set names to match (incl. *)

local

1 elements hidden by filter

Problems

Javadoc

Declaration

Console

smartcontactmanager - SmartcontactmanagerApplication [Spring Boot App] D:\sts-4.17.2.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.6.v20230125-1

from

contact contacts0_

where

contacts0_.user_id=?

USER User [id=6, name=Ram Sharma, email=test@gmail.com, password=\$2a\$10\$We1ZG4SPvkuvvB3egjSACeb44LaYK6YVPfg/fG6qFCrtjcabKIbaC, r

Writable

Insert

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21-04-2023


```

Command Prompt - docker t x + v

(c) Microsoft Corporation. All rights reserved.

C:\Users\hp>cd E:\SMART_GIT\smartcontactmanager

C:\Users\hp>docker login
Authenticating with existing credentials...
Login Succeeded

Logging in with your password grants your terminal complete access to your account.
For better security, log in with a limited-privilege personal access token. Learn more at https://docs.docker.com/go/access-tokens/

C:\Users\hp>cd C:\Users\hp\OneDrive\Desktop\smartcontact\smartcontactmanager

C:\Users\hp\OneDrive\Desktop\smartcontact\smartcontactmanager>docker build -t spring-boot-docker.jar .
[+] Building 6.0s (5/7)
=> [internal] load build definition from Dockerfile 0.0s
=> => transferring dockerfile: 181B 0.0s
=> [internal] load .dockerignore 0.0s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/openjdk:11 3.2s
=> [auth] library/openjdk:pull token for registry-1.docker.io 0.0s
=> [internal] load build context 0.6s
=> => transferring context: 48.37MB 0.5s
=> [1/2] FROM docker.io/library/openjdk:11@sha256:99bac5bf83633e3c7399aed725c8415e7b569b54e03e4599e580fc9cdb7c21ab 2.7s
=> => resolve docker.io/library/openjdk:11@sha256:99bac5bf83633e3c7399aed725c8415e7b569b54e03e4599e580fc9cdb7c21ab 0.0s
=> => sha256:99bac5bf83633e3c7399aed725c8415e7b569b54e03e4599e580fc9cdb7c21ab 1.04kB / 1.04kB 0.0s
=> => sha256:001c52e26ad57e3b25b439ee0052f6692e5c0f2d5d982a00a8819ace5e521452 2.10MB / 55.00MB 2.7s
=> => sha256:2068746827ec1b043b571e4788693eab7e9b2a95301176512791f8c317a2816a 0B / 10.88MB 2.7s
=> => sha256:e81b7f317654b0f26d3993e014b04bcb29250339b11b9de41e130feecd4cd43c 1.79kB / 1.79kB 0.0s
=> => sha256:47a932d998b743b9b0bcce55aa8ede77de94a6a183c8a67dec9d5e3b8ce0faa7 6.26kB / 6.26kB 0.0s
=> => sha256:d9d4b9b6e964657da49910b495173d6c4f0d9bc47b3b44273cf82fd32723d165 0B / 5.16MB 2.7s

```

```

Command Prompt
=> [internal] load build context                                0.6s
=> => transferring context: 48.37MB                             0.5s
=> [1/2] FROM docker.io/library/openjdk:11@sha256:99bac5bf83633e3c7399aed725c8415e7b569b54e03e4599e580fc9cdb7c21ab 289.3s
=> => resolve docker.io/library/openjdk:11@sha256:99bac5bf83633e3c7399aed725c8415e7b569b54e03e4599e580fc9cdb7c21ab 0.0s
=> => sha256:99bac5bf83633e3c7399aed725c8415e7b569b54e03e4599e580fc9cdb7c21ab 1.04kB / 1.04kB 0.0s
=> => sha256:001c52e26ad57e3b25b439ee0052f6692e5c0f2d5d982a00a8819ace5e521452 55.00MB / 55.00MB 129.9s
=> => sha256:2068746827ec1b043b571e4788693eab7e9b2a95301176512791f8c317a2816a 10.88MB / 10.88MB 49.7s
=> => sha256:e81b7f317654b0f26d3993e014b04bcb29250339b11b9de41e130feecd4cd43c 1.79kB / 1.79kB 0.0s
=> => sha256:47a932d998b743b9b0bcce55aa8ede77de94a6a183c8a67dec9d5e3b8ce0faa7 6.26kB / 6.26kB 0.0s
=> => sha256:d9d4b9b6e964657da49910b495173d6c4f0d9bc47b3b44273cf82fd32723d165 5.16MB / 5.16MB 13.8s
=> => sha256:9daef329d35093868ef75ac8b7c6eb407fa53abbc3a264c218c2ec7bca716e6 54.58MB / 54.58MB 111.6s
=> => sha256:d85151f15b6683b98f21c3827ac545188b1849efb14a1049710ebc4692de3dd5 5.42MB / 5.42MB 80.2s
=> => sha256:66223a710990a0ae7162aeed80417d30303afa3f24aafa57aa30348725e2230b 213B / 213B 84.6s
=> => sha256:db38d58ec8ab4111b072f6700f978a51985acd252aabce3be377f25162e68301 202.07MB / 202.07MB 285.0s
=> => extracting sha256:001c52e26ad57e3b25b439ee0052f6692e5c0f2d5d982a00a8819ace5e521452 1.7s
=> => extracting sha256:d9d4b9b6e964657da49910b495173d6c4f0d9bc47b3b44273cf82fd32723d165 0.2s
=> => extracting sha256:2068746827ec1b043b571e4788693eab7e9b2a95301176512791f8c317a2816a 0.2s
=> => extracting sha256:9daef329d35093868ef75ac8b7c6eb407fa53abbc3a264c218c2ec7bca716e6 1.9s
=> => extracting sha256:d85151f15b6683b98f21c3827ac545188b1849efb14a1049710ebc4692de3dd5 0.2s
=> => extracting sha256:66223a710990a0ae7162aeed80417d30303afa3f24aafa57aa30348725e2230b 0.0s
=> => extracting sha256:db38d58ec8ab4111b072f6700f978a51985acd252aabce3be377f25162e68301 3.8s
=> [2/2] ADD target/spring-boot-docker.jar spring-boot-docker.jar 0.3s
=> exporting to image 0.3s
=> => exporting layers 0.3s
=> => writing image sha256:7fec77509ec1b373291701ee48c181bd4e2089c39f863d9364f724dd97293fa8 0.0s
=> => naming to docker.io/library/spring-boot-docker.jar 0.0s

C:\Users\hp\OneDrive\Desktop\smartcontact\smartcontactmanager>docker images
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
spring-boot-docker.jar latest      7fec77509ec1  27 seconds ago 703MB

C:\Users\hp\OneDrive\Desktop\smartcontact\smartcontactmanager>docker run -p 9090:8080 spring-boot-docker.jar .|

```


Home - Smart Contact Manager

localhost:9090

Import favorites | YouTube | Maps | Gmail | Untitled design - Vi... | Reshape buying for... | Booking.com | Continuous integra... | Other favorites

Smart Contact Manager


HOME ABOUT LOGIN SIGNUP


Smart Contact Manager

Start Collecting your contacts in very smarter way. We provide very efficient and smarter way of handling contacts.

Get Start

29°C
Sunny

 Search



ENG
IN

11:21
13-04-2023

SWOT Analysis

Strengths:

- Centralized storage and management of contact information
- Automated data entry and contact updates
- Ability to segment contacts and personalize communication
- Security
- Each user have individual Dashboard
- Password/credentials can be changed in case user forgets
- Improved efficiency and productivity when managing contacts

Weaknesses:

- Dependence on technology and potential for data loss or technical issues
- Limited functionality for complex CRM needs or large-scale data management
- Potential learning curve for new users or employees
- May require additional investment for integration with other tools or software

Opportunities:

- Growing demand for digital solutions in personal and professional contact management
- Potential for customization and integration with other tools and software
- Expansion into new markets or industries with specialized needs for contact management
- Partnership opportunities with related businesses or software providers

Threats:

- Competition from existing CRM and contact management software providers
- Security and privacy concerns related to storing and sharing contact information
- Rapidly changing technology and potential for obsolescence
- Economic downturns or changes in market demand for contact management solution

Applications of the Project

1. **Personal Contact Management:** A smart contact manager can be used by individuals to manage their personal contacts, including friends, family, and colleagues. The application can store all contact information, including phone numbers, email addresses, social media profiles, and more, making it easy to keep in touch and stay organized.
2. **Business Contact Management:** Smart contact managers can be used by businesses to manage their customer and client contacts. The application can store all customer contact information, including phone numbers, email addresses, and purchase history, making it easy to keep track of customers and provide better service.
3. **Sales and Marketing:** Smart contact managers can be used by sales and marketing teams to manage their leads and prospects. The application can store all contact information, including their interests and preferences, making it easy to personalize marketing campaigns and close more deals.
4. **Event Management:** Smart contact managers can be used to manage contacts for events such as conferences, trade shows, and meetings. The application can store all attendee contact information, making it easy to manage registrations, send out invitations, and communicate with attendees.
5. **Human Resource Management:** Smart contact managers can be used by human resource departments to manage employee contact information, including emergency contacts and work-related information. This makes it easy to keep track of employees and contact them in case of emergencies.

Conclusion

Your contact information can be organized and maintained with the help of a clever contact organizer. A smart contact manager can increase productivity and save time by utilizing technology to automate processes like contact syncing and updating. A smart contact manager's key features include the capacity to instantly identify and merge duplicate contacts, classify contacts or tags, and sync contacts across various platforms and devices. Overall, a clever contact manager can save you time, help you remain organized, and make sure that your contact information is readily available and current. However, it's crucial to pick a trustworthy and private contact manager that suits user requirements and preferences.

References

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Thank You