

# **N.B.K.R.I.S.T VIDYANAGAR AUTONOMUS**

## **SBI CREDIT CARD PROCESSING APPLICATION**

**SBI CREDIT CARD PROCESSING APPLICATION SYSTEM USING QUEUE IN C**

**PRESENTED BY**

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# OBJECTIVE

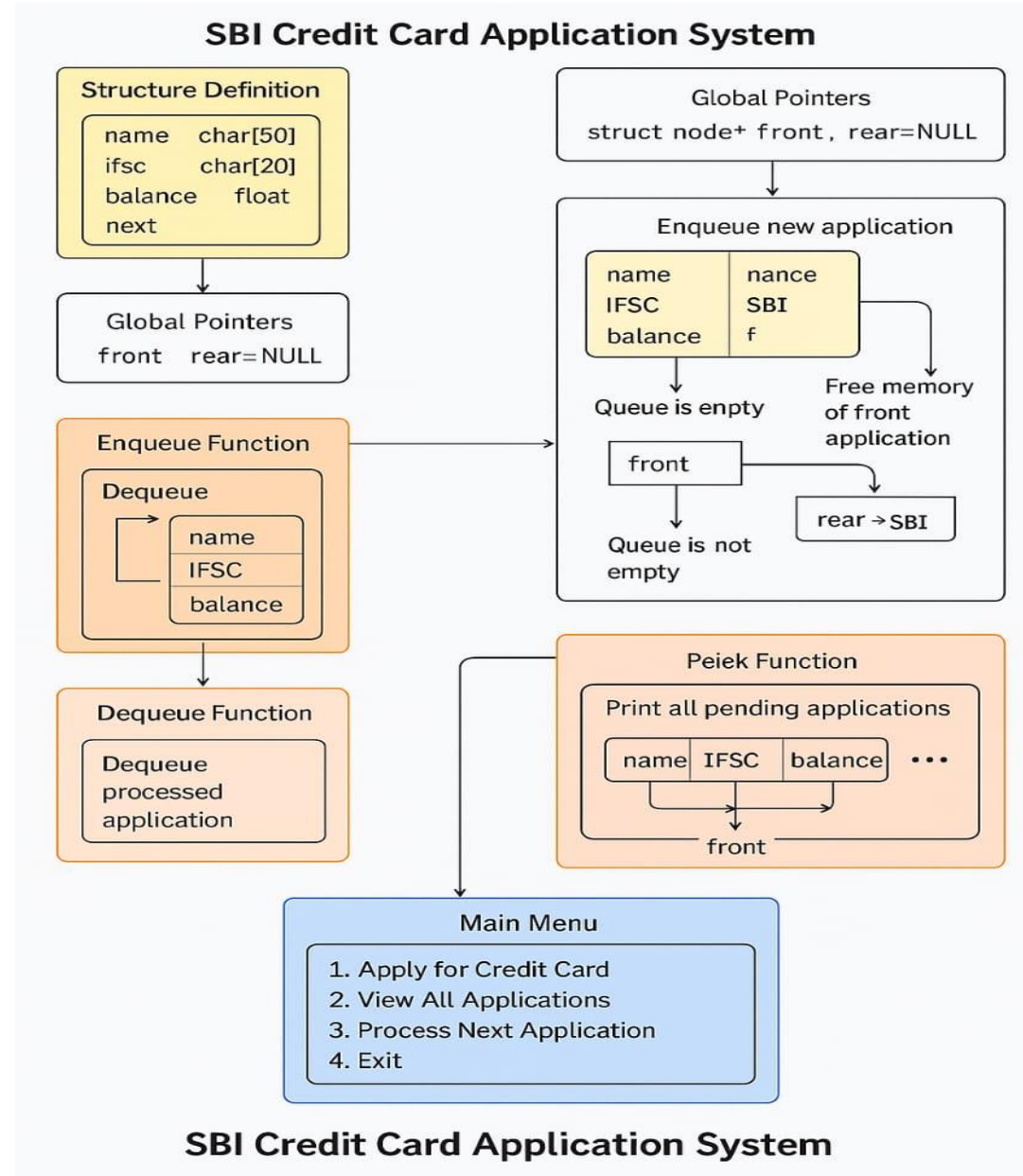
This project simulates a real-world credit card application processing system using data structures. It uses a queue-based approach to handle multiple applications in the order they are received. Linked list concepts are applied for dynamic memory allocation and flexibility in managing the queue. Users can apply, view, and process credit card applications efficiently through a command-line menu interface. The system helps reinforce understanding of queue operations like enqueue, dequeue, and peek using C programming.

# QUEUE

- A Queue Data Structure is a fundamental concept in computer science used for storing and managing data in a specific order.
- It follows the principle of "First in, First out" (FIFO), where the first element added to the queue is the first one to be removed.



# Diagrammatic view of the application

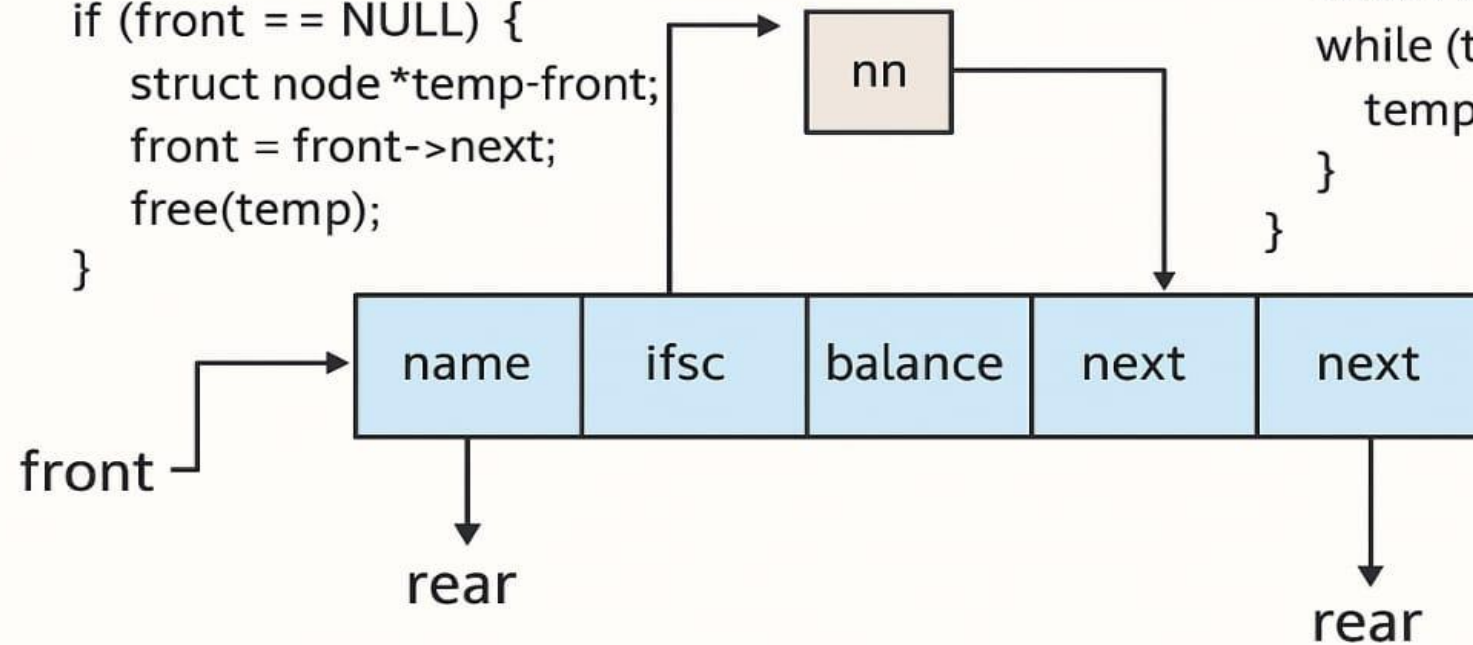


```
struct node* front =  
NULL, rear = NULL;
```

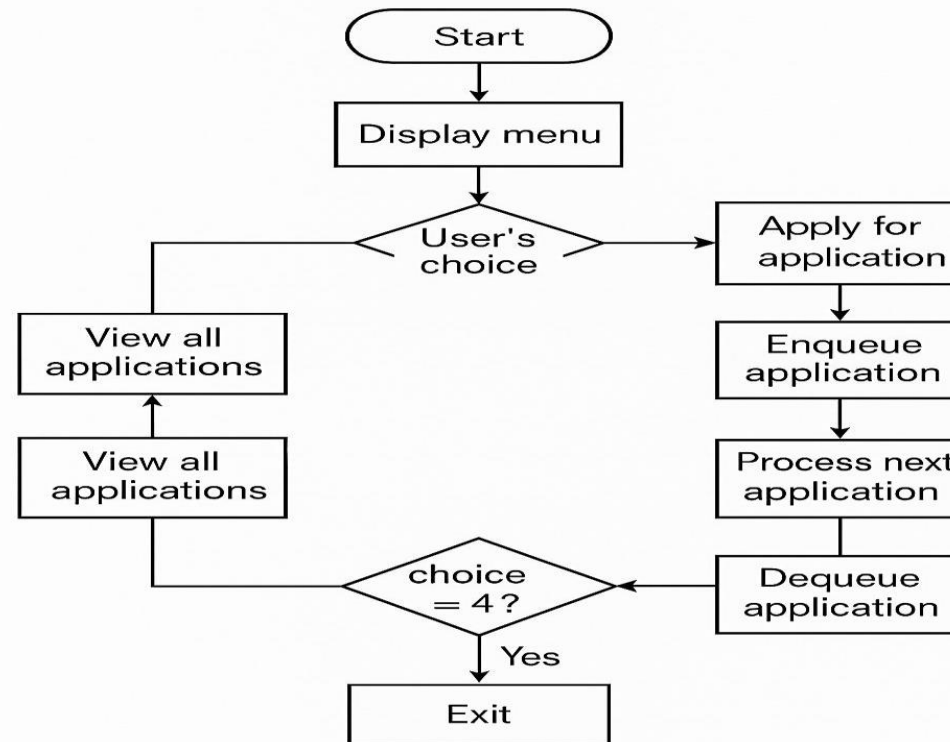
```
void enqueue(char name[], char ifsc [], float balance) {  
    rear->next = nn;  
    rear = nn;  
}
```

```
void dequeue()  
{  
    if (front == NULL) {  
        struct node* temp = front;  
        front = front->next;  
        free(temp);  
    }  
}
```

```
void peek() {  
    struct node* temp = front;  
    while (temp != NULL) {  
        temp = temp->next;  
    }  
}
```



## FLOW CHART



Credit Card Application  
System



## SOURCE LINK

<https://github.com/maheshchallagiri/SBI-banking-application-process-/blob/main/main.c#L1>



# Sample output



==== Credit Card Application Menu ====

1. Apply **for** Service
2. View All Applications
3. Process Next Application
4. Search Application
5. Update Application
6. Delete Application
7. Exit

Enter your choice: **1**



(User applies for a service)

```
Enter Name: Alice
Enter Gender: Female
Enter Address: 123 Main Street
Enter Date (dd/mm/yyyy): 06/05/2025
Enter Time (hh:mm): 10:30
Enter IFSC Code: SBIN0001234
Enter Account Number: 1234567890
Enter Balance: 15000
Enter Service Type: Gold Credit Card
Enter Phone Number: 9876543210
Enter Transaction Status: Pending
Enter PAN Number: ABCDE1234F
Enter Aadhar Number: 123456789012
Enter Payment Status (Paid/Unpaid): Paid
Application submitted successfully for Alice.
```

User adds another application:

```
Enter your choice: 1
Enter Name: Bob
Enter Gender: Male
Enter Address: 456 Elm Road
Enter Date (dd/mm/yyyy): 06/05/2025
Enter Time (hh:mm): 11:00
Enter IFSC Code: SBIN0005678
Enter Account Number: 9876543210
Enter Balance: 20000
Enter Service Type: Platinum Credit Card
Enter Phone Number: 9123456780
Enter Transaction Status: Pending
Enter PAN Number: FGHIJ5678K
Enter Aadhar Number: 234567890123
Enter Payment Status (Paid/Unpaid): Unpaid
Application submitted successfully for Bob.
```

User views all applications:



Enter your choice: 2

--- Pending Applications ---

Name: Alice | Gender: Female | Phone: 9876543210  
Address: 123 Main Street  
Date: 06/05/2025 | Time: 10:30  
IFSC: SBIN0001234 | Account No: 1234567890 | Balance: 15000.00  
Service: Gold Credit Card | PAN: ABCDE1234F | Aadhar: 123456789012  
Transaction: Pending | Payment: Paid

Name: Bob | Gender: Male | Phone: 9123456780  
Address: 456 Elm Road  
Date: 06/05/2025 | Time: 11:00  
IFSC: SBIN0005678 | Account No: 9876543210 | Balance: 20000.00  
Service: Platinum Credit Card | PAN: FGHIJ5678K | Aadhar:  
1234567890123 Pending | Payment: Unpaid

User searches for Alice:

```
Enter your choice: 4
Enter name to search: Alice

--- Application Found ---
Name: Alice | Gender: Female | Phone: 9876543210
Address: 123 Main Street
Date: 06/05/2025 | Time: 10:30
IFSC: SBIN0001234 | Account No: 1234567890 | Balance: 15000.00
Service: Gold Credit Card | PAN: ABCDE1234F | Aadhar:
123456789012 Pending | Payment: Paid
```

User updates Bob's application:



```
Enter your choice: 5
Enter name to update: Bob

--- Updating Application ---
Enter Name: Bob
Enter Gender: Male
Enter Address: 456 Elm Road, Apt 2
Enter Date (dd/mm/yyyy): 06/05/2025
Enter Time (hh:mm): 11:00
Enter IFSC Code: SBIN0005678
Enter Account Number: 9876543210
Enter Balance: 25000
Enter Service Type: Platinum Credit
Enter Phone Number: 9123456780
Enter Transaction Status: Approved
Enter PAN Number: FGHIJ5678K
Enter Aadhar Number: 234567890123
Enter Payment Status (Paid/Unpaid):
Application updated.
```

User deletes Alice's application:



```
Enter your choice: 6
Enter name to delete: Alice
Application deleted.
```

User processes the next application (Bob):

```
Enter your choice: 3

--- Processed Application ---
Name: Bob | Gender: Male | Phone: 9123456780
Address: 456 Elm Road, Apt 2
Date: 06/05/2025 | Time: 11:00
IFSC: SBIN0005678 | Account No: 9876543210 | Balance: 25000.00
Service: Platinum Credit Card | PAN: FGHIJ5678K | Aadhar:
1234567890123 Approved | Payment: Paid
```

User tries to view applications again:

```
Enter your choice: 2
No pending applications.
```

---

User exits the program:



```
Enter your choice: 7  
Thank you for using the Application  
System.
```

---

## ✓ Conclusion

- In this project, we created a simple system to manage credit card applications using the concept of **queues** in C language.
- Users can apply for a card, view their application, search by name, update or delete it, and process applications one by one in the order they came.
- We used a **linked list** to make the queue work well even when applications are added or removed.
- This project helped us understand **how data structures like queues** work in real programs. We also practiced **functions, pointers, and user input** in C.



The background is a deep blue gradient. It is filled with a complex network of glowing, light blue lines that intersect and curve across the frame. Small, bright blue dots and larger, soft blue bokeh-like circles are scattered throughout, particularly concentrated along the lines and in the upper left quadrant. The overall effect is one of dynamic energy and digital connectivity.

**THANK YOU**