DEVELOPMENT OF PROTOTYPE FOR PAYMENT APP [EASY PAY]

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INTRODUCTION:

Voice Based Payment Application: We are mainly foccusing on the voice voice based payment app. That will help the Low-sight people and Many illeterate people. They can use their own language.

- Not only the voice inputs also the voice output from the application like payment done and how much? is possible with this UI..
- In this project we have taken a Payment Application named our We also include voice outputs and feedback.

SCOPE OF THE PROJECT:

By this project we are hoping that the imagination of the payment app in people mind will be changed. That every one can use it who has the sufficient requirements. The all time advanced payment app with voice input and output this is beyond technology of the existing apps which are used for the payments. Usage of this will be more for the low sight people in our scope/

PROBLEM STATEMENT:

In the present-day environment, The online payments are most commonly used in daily life. But the problem is Those payment systems are they cannot be used by the low sight people. Also UI user friendly.

OVERVIEW OF THE PROCESS :
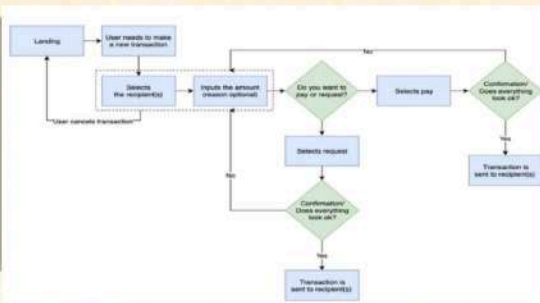
REQUIREMENTS:

As a user i need:

- A Bank Account and a debit or credit card.
- A proper interface which can guide me on how to use the device
- An user friendly and the feeedback giving like all languages are available for voice.
- Menu in the home page for quick access of all the problem
- All the transactions made want to be visible as the clear and with invoices.

FEATURES:

- Voice based payments and voice based outputs. Scanner which is also used for scanning invoives.
- Menu driven interface.Voice-Based interface.
- Feedback-Giving interface.Touch screen User interface. Auditory interface

PERSONAS

Age group of 15 and above	Low sight people	Merchants
• Majority of the users are under this persona. • They can use all the uses like voice and feedback. • They can also change the language in the settings.	• They can't see and type the information of payments and also, they can't read the transactions So. • Voice input and output is enabled.	• They deal with many transactions daily so • The option that differ for them is which money is received and hoe much.

PROTOTYPE
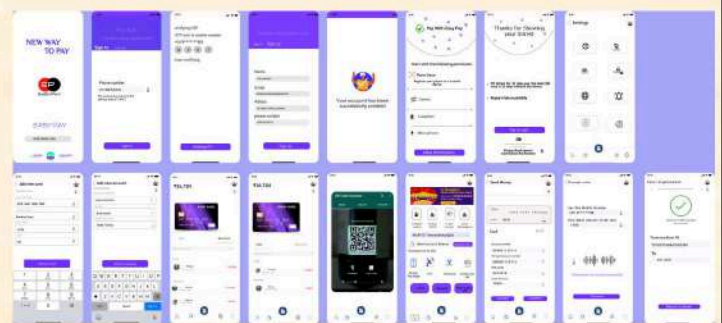
The slides of our EASY PAY.

TASK ANALYSIS FOR EASY PAY.

RESULT:

As we have done our HUMAN COMPUTER INTERACTION PROJECT on EASYPAY Online Money Transaction App Interface we have implemented some new features like briefing the users about the application and providing various options to explore the features of our application. Even the novice users can easily access our platform.

REFERENCES:

1. https://www.researchgate.net/publication/289614337_Speech_Recognition_Technology_Application_future

2. https://www.researchgate.net/publication/304651244_VOICE_RECOGNITION_SYSTEM_SPEECH-TO-TEXT

3. https://www.researchgate.net/publication/320673140_A_New_Human_Voice_Recognition_System

4. https://www.researchgate.net/publication/220471916_Voice_recognition_An_examination_of_an_evolving_technology_and_its_use_in_organizations

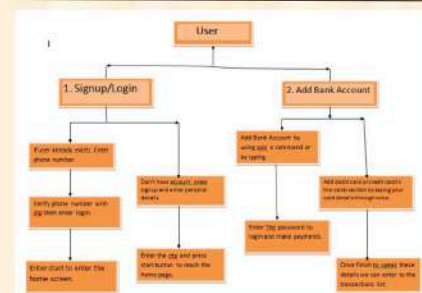5. https://www.ijedr.org/papers/IJEDR1404035.pdf

EASY PAY

-Be advance the world is behind you.

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TABLES OF CONTENT

ABSTRACT :

❖ **Voice Based Payment Application:**

- Now a days many people are using UPI payments instead of cash .. We are focusing on best interface of the payment app that the low sight people can done their payments easily and by their own ..

- We are in including voice payments in our UI design and using ai for the recognizing of who is doing the payment... So that they can make the transaction easily and securely .

- Not only the voice inputs also the voice output from the application like payment done and how much? is possible with this UI..

INTRODUCTION

- Cashless society describes an economic state where financial transactions are not conducted with money in the form of physical bank notes or coins, but rather than digital currency, crypto currency is used through Online payment applications.

- In this project we have taken a Payment Application named our application EASY PAY-Transaction Application. Now a days due to pandemic all people are facing difficulties for making the transactions through the banks. So, they are preferring online payments applications. It helps you transfer money instantly to anyone at zero cost using the Wallet of the payment app and the app is specially designed for the people who are blind, and for lazy people and we can say that its in a advance state of any other payment app.

- This money can then be used to pay seamlessly at several places like taxi and autos, petrol pumps, grocery shops, restaurants, coffee shops among others. It could also use it to pay for online recharges, utility bill payments, book movie or travel tickets among other things on the official website of the application.

PROBLEM IN EXISTING MODEL :

➢ In the present-day environment, The online payments are most commonly used in daily life. But the problem is Those payment systems are supported with voice-based UI . So that Low sight people can't use these applications. To give the solution to this problem we are preparing a voice-based UI with the support of AI for face recognition .

➢ By this voice-based application we can solve the problem of low sight people payment issue.

USER ANALYSIS :

- All UPI user's
- Merchants of all Business
- Age group above 15 who's having bank account
- Language preference – Literate people of English
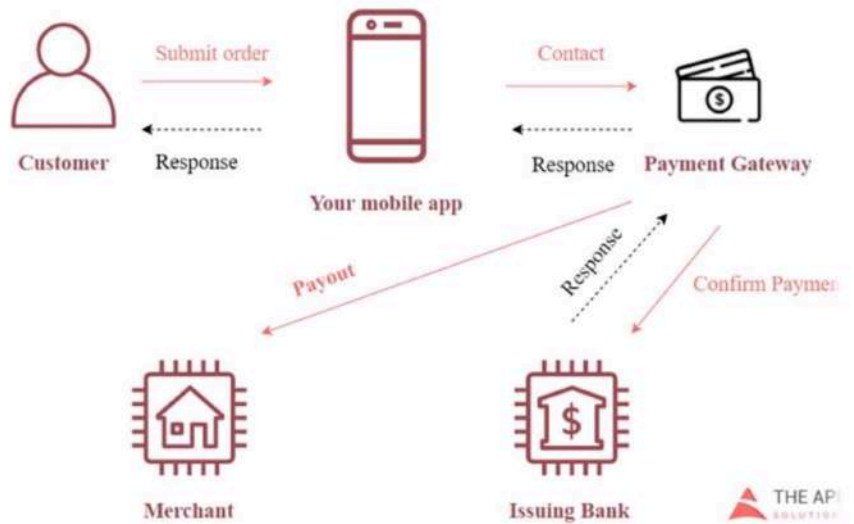
FUNCTIONAL REQUIRMENTS

- SIGN IN: If a user needs to create an account, initially, he/she need to fill the details in the form where users will be asked to provide the email address, password, repeat password. We suggest the users to read the teams and policies of our application so that they can know about our norms.

- 2. USER VERIFICATION: User should be able to verify them through their registered mobile number. A One Time Password will be generated to their respective mobile number and get verified, if he/she is logging for the very first time.

- 3. LOGIN: If a user needs to use this system, he/she has to enter their username and password which he/she has created before and have been saved in the database of the login page.

- 4. VISIBILITY: As a designer we will be focusing on easy navigation i.e., the user needs the app should be more effective to use and switch to one tab to another tab with ease.

- 5. TRANSACTIONS: Using the username and password users can login to their account, they can manage their Bank account, credit card and digital Wallet. Transactions made simple, so users can make transaction at any time which completes in seconds.

NON FUNCTIONAL REQUIREMENTS

- MAINTAINABILITY: It is one of the important non-functional requirements. The system should have the capacity to adapt to the environment bases on the changes we make in website. If the any changes in the system or user information the system allows us to make changes. If the user chooses for any service in the app, they expect an immediate response from the system so we should maintain the system to show the expected result to the user. We keep trace of the number of users and update our server to avoid server crash.

- 2. EFFICIENCY: Efficiency is the ability of the software to give desired result. Whatever the user's expectations we need to fulfil their needs or expectations. Efficiency means that it always wants to do the things in a right way. Efficiency of the system should always be in a high level, whatever relevant input you are giving to the system, should have that efficient to give the output.

- 3. SECURITY: Security measures ensure your software's safety against espionage or sabotage. Security features in payment apps: The account details of the users have to be secured. The transaction history has to be viewed only by the user, the login credentials necessary authentication for people to have their services according to their need

- 4. RELIABILITY: Reliability is an attribute of system and the system should perform the functionalities according to its specifications. The system should be reliable to the user or the customer, it should permit user to use for a long period then only the system should be reliable to the user. The system can work on demand without any degradation or a failure.

Age group of 15 and above	Low sight people	Merchants
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INPUT AND OUTPUT'S

- Login using phone number.
- Voice inputs.
- Keyboard inputs.
- Speech output of system.
- Feedback on the screen output.
- Scanning the QR code to pay

STAKEHOLDERS ANALYSIS :

- Users of ages equal and above 15 years, for utilizing our platform.

- Low sight people can use our application with provided bank information.

- Banking system collaboration.

- Users and Merchants Bank account.

- AI and ML Developer team.

- Network Service Provider(NSP).

- Payment Service Providers.

- Marketing to promote this application

TECHNOLOGIES INVOLVED

- Voice Recognition (Voice AI)

Text dependent: Depends on the Specific set of words the persons says- you need step – up authentication and identify verification and in order to be activated, user has to say necessary phrase
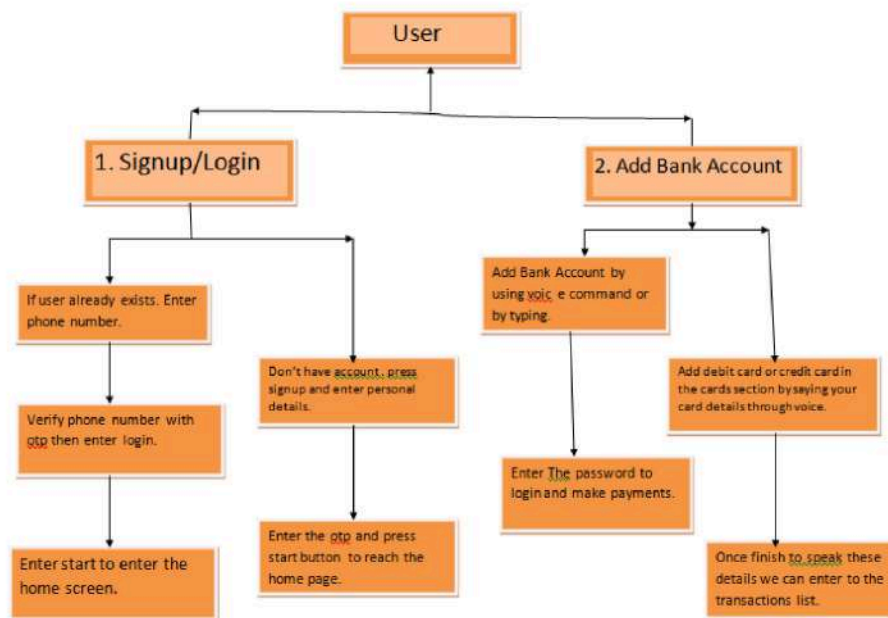
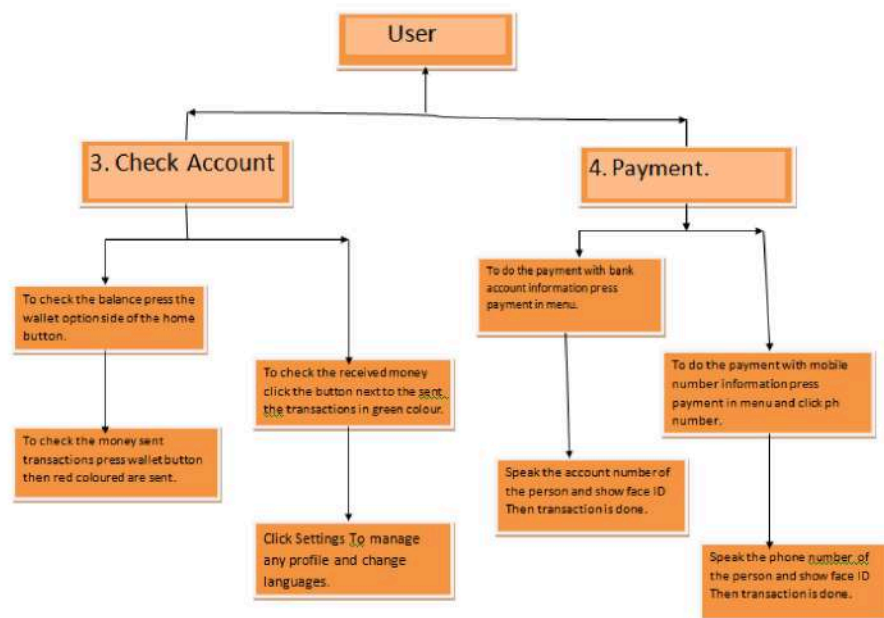Text independent: does not depend on a specific text yet relies on conversation speech

Voice recognition is able to Authenicate the speaker by analysing the patterns and sequences of a person's voice hence capable to identify the specific person

- Face recognition system are built on the idea that each person has a particular face structure and using the facial symmetry, computerized face – matching is possible

- Through face capture- process transform analog information into a set of digital information based on the person's facial feature

WIRESHARK OF UI

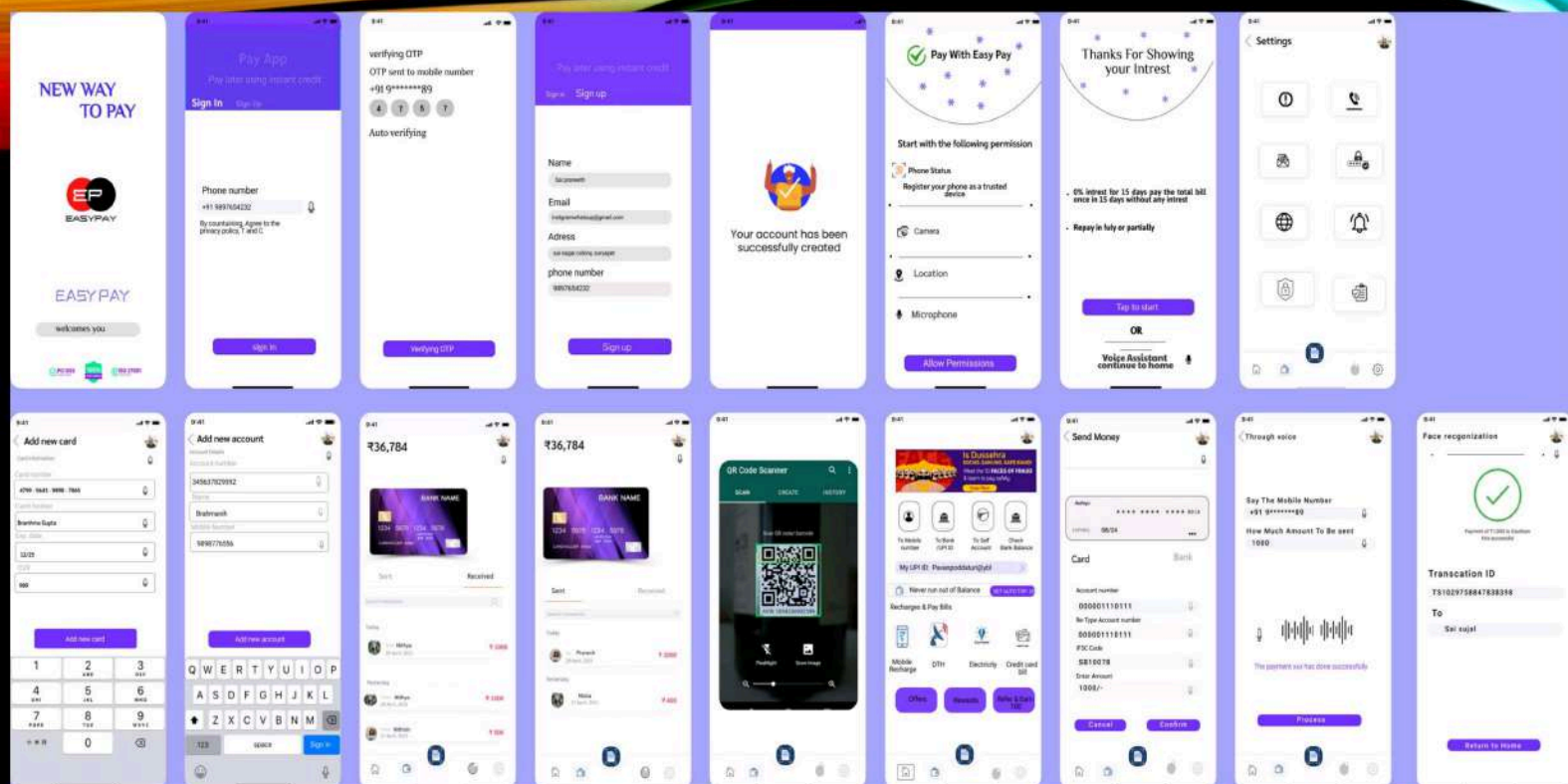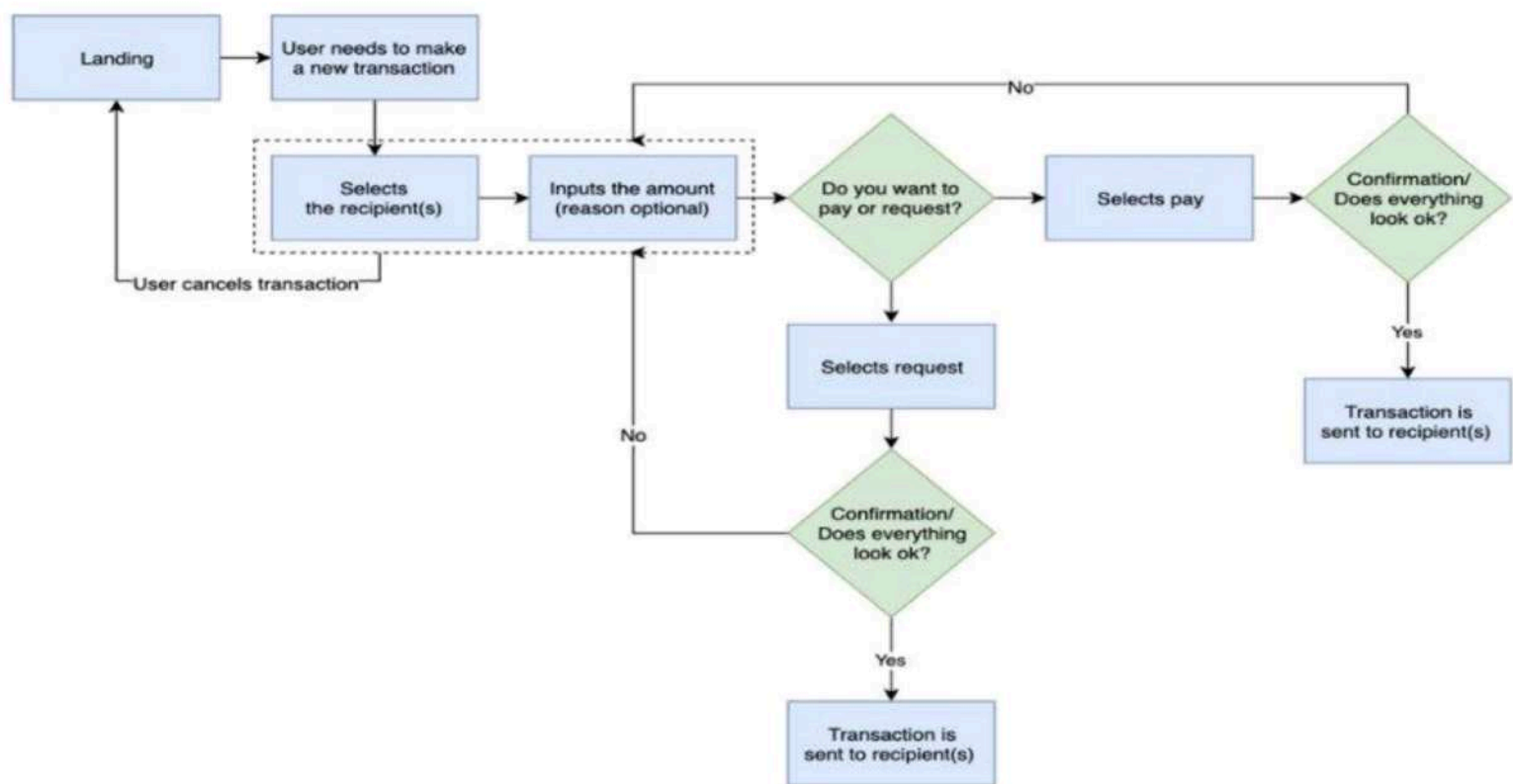- https://www.figma.com/file/Utx57cQQicvLAC0HmswvQm/HCI-PROJECT?node-id=0%3A1
- https://www.figma.com/proto/Utx57cQQicvLAC0HmswvQm/HCI-PROJECT?node-id=58%3A5&scaling=scale-down&page-id=0%3A1&starting-point-node-id=1%3A2

Landing → User needs to make a new transaction

Selects the recipient(s) → Inputs the amount (reason optional)

User cancels transaction

Do you want to pay or request?

No

Selects pay → Confirmation/ Does everything look ok?

Yes

Transaction is sent to recipient(s)

Selects request

Confirmation/ Does everything look ok?

No

Yes

Transaction is sent to recipient(s)

Menu driven interface.

Voice-Based interface.

Feedback-Giving interface.

Touch screen User interface.

Auditory interface

HCI TOPICS USED IN INTERFACE

CONCLUSION

- As we have done our HUMAN COMPUTER INTERACTION PROJECT on EASYPAY Online Money Transaction App Interface we have implemented some new features like briefing the users about the application and providing various options to explore the features of our application. Even the novice users can easily access our platform. We hope that the features that we have added in the application and the user interface is more user-friendly for all kind of users.

REFERENCES

- https://www.researchgate.net/publication/289614337_Speech_Recognition_Technology_Application_future
- https://www.researchgate.net/publication/304651244_VOICE_RECOGNITION_SYSTEM_SPEECH-TO-TEXT
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