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Chatting Wings Application

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Abstract: Today, the latest version ofdevelopment of the internet has been in our hand. Everything happens throughinternet from passing information from one point to another. This project is also based on the internet thatshowthe importanceofthe chatting with surrounding such asfriends,family,and to theother also. Thisplatformwill developtointeract withanotheronthe internet. Our applicationismuchmorereliableand securethantheothertraditionalsystem.
Thechattingwingsapplicationwillalsogivethedifferentservicessuchasfreelychattootherandalsohelptotransfersthemessageinbothwaythatisprivateorpublic.Italsogivesthefeaturesthatis enabletheotherresourcessuchasvideos,imagesetc.

I. INTRODUCTION

Asweknownthatchattingplatformtakelargeamountofimpactontodaylife.Andtherewilldifferentlynumbersof chattingapplication available with theirfeatures.Butour chatting applicationalso hasfeatureswhichisvaryingformtheotherapplication. Peoplewill easilycommunicatetotheir surroundings withbetterexperience,reliabilityandsecurity.
In thisapplicationbothsenderandreceiverwillsendorreceivemessagessimultaneouslybyusingthe MERN concept.

- WelcometoChatWingsthesmart,seamless,andsecurewaytostayconnected.Designedformodernconversations,ChatWingstakesyourmessagingexperiencetonewheightswithreal- timecommunication,andpowerfulfeaturesthatkeepyouincontrol.
- Whetheryou'rechattingwithfriends,collaboratingwithcolleagues,ormeetingnewpeople,ChatWings empowers every conversation with speed, clarity, and privacy.
- Fromvoiceandvideocallstofilesharingandencryptedmessaging,everythingyouneedisjusta tap away.
- Itistimesavingandenergysaving.
- Personcaneasilylogintositewhilesittingonhome
- ManagetheintonationofInternet
- ShowstheinformationanddescriptionoftheShopping.

Overview of Organization
Tech pileisanorganizationworkinginbothsoftwaredevelopmentandsoftwaretraining,whichaims tomake all the specials of its client successful through their coding as well as to make students more competenttoworkwithawellreputedorganization.
Weareproudofourhigh-qualitystandards.Thesestandardsallowustoprovideourcustomerswithreliableand xenofreeapplications, regardlessof complexity. Ourtop-notchdevelopersusethelatestsoftware Methodologies andtechnologies. This means that theycanconcentrate on ourclients' businessgoalsandkeeptheminvolvedineverystagethroughtheentireproject.Ourmeticulousapproachhashelpedusbuild our excellenttrack record with no failedor abortedprojects.Wearein thebusiness of change,managing complexity withanun paralleled insight, lookingbey on dthehorizonofITwith resourcesfocusedonsolutions.

II. PROBLEMSTATEMENT

Inthissectionweshalldiscussthelimitationanddrawbackoftheexistingsystemthatforcedustotakeupthis project. Really that work was very typical to manage the daily errors flee records andaddingorremoving any node front server.This problem produces a need to change the existing system. Some of theseshortcomingsarebeingdiscussedbelow:-

A. Low Functionality

Withtheexistingsystem,thebiggestproblemwasthelowfunctionality. Theproblemfacedhamperedthe work.

B. Portability Problem

Systemthatexistedpreviouslywasannual. Asaresult,thesystemwaslessportable.Onehastocarrytheloads ofmanyregisterstotakethedata frothone placeto another. Abigproblemwasthatthesystemwasless flexible and if we wanted to calculate yearly or monthly maintenance report or efficiency report

C. Security

SecurityconcernswerealsooneofthenativesoftheCompanyfortheneedofsoftware.Intheregisters,thedataisnotsecureasanybodycantamperwiththedatawrittenintheregisters.Thissoftware,justapasswordmakesitabsolutelysecurefromthereachofunauthorizedpersons.

D. Data

Inthecaseofmanualsystem,theregistersaremaintainedinwhich,alotofdataiswritten. Complexity in work.In manualsystemwhen everarecor distobeupdatedortobedeletedalotofcuttingandoverwriting needsto bedoneon theregistersthatareconcerned thataredeletedorupdatedrecord.

III. LITERATURE REVIEW

With the development of the internet, large amountof peoplewill be choosing the network forcommunication. Ourapplicationwillprovidethecommunicationoverthelongdistancesandalsoworkonthemulti-platformandreal- timeused bythemany usersover theinternet.

Chattingapplicationshavebecomeanintegralpartofmoderncommunication,enablingusersto interactwitheachotherinreal-time.Theriseofmessagingappsandchatbotshastransformedtheway peoplecommunicate,accessinformation,andseeksupport. Thisliteraturereviewaimstoprovide anoverviewofthecurrentstateofresearchon chattingapplications,theirfeatures,benefits,andchallenges.

TheprogrammingtoolsusedinbuildingthisapplicationisReact.js,Node.jswithexpressframeworkandmongoDBdatabase.Thisapplicationisbeingdevelopedforcommunication.Forthis,usersmustregister with their information.

- Theevolutionofcommunicationtechnologieshasdramaticallytransformedthewayindividualsinteractinbothpersonalandprofessionalsettings.Instantmessagingapplicationshavebecome integraltodailycommunication,speed,accessibility,andawiderangeofmultimedia functionalities.
- This literature review explores the existing body of work related to messaging platforms, focusingonusability, privacy,userengagement,andtechnologicalinnovations,whichserveas thefoundationforthedevelopmentoftheChatWingsapplication.
- InstantMessagingandCommunicationTrends
- PrivacyandSecurityinMessagingApplications
- UserEngagementandBehaviouralAspects

IV. PROPOSED METHODOLOGY

ThisprojectismadebyusingAndroidstudio,Virtualemulator.Theprogramminglanguageusedfor building the application are java, XML. UserinterfaceidhandleusingXMLcodes. Backendprogramming ishandledmainlythroughsetofjava codes.

Theotherlibrariesrequiredare -

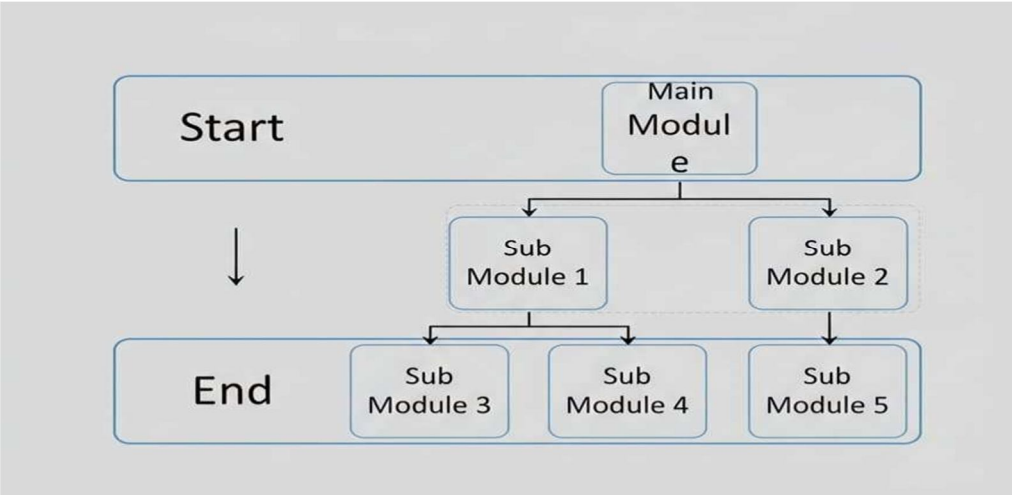
- AndroidSDKtools
- AndroidSDKplatformtools
- AndroidSDKbuildtools
- SDKplatform
- Intelx86Atom_64systemImage
- GoogleAPIs
- GoogleAPIs ARMEABIv7asystem
- GPUDebuggingtools
- Androidsupportlibraries
- IntelxEmulatorAccelerator(HAXMinstaller)

The developmentoftheChat Wingsapplicationfollowedastructuredmethodologyaimedatensuringauser-friendly, secure, and high-performance messaging platform.

V. SYSTEM DESIGN APPROACH

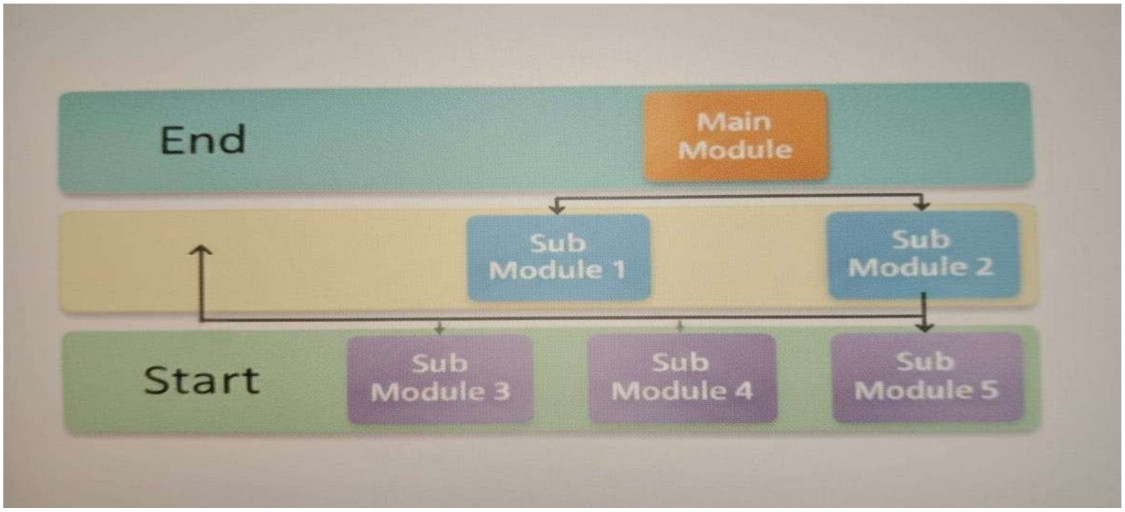
A. Top-downdesigning

The top - down designing approach started with major components of the system. It is astepwise refinement whichstarts froman abstract design, in eachsteps the designis refined twoor more concrete levels untilwe reach a level where no — more refinement is possible or not needed.



B. Bottom-topdesigning

In this approach the most basic and primitive components are designed first, and we proceed to higherlevel components. We work with layers of abstraction are implemented until the stage is reached wheretheoperationssupportedbythelayeriscomplete.



VI. HARDWARE REQUIERMENT

MicrosoftWindows7/8/1(32or64bit)
2GBofavailablediskspaceminimum,4GBreconnectedMBforIDE+1.5for AndroidSDKandemulatorsystemimage)
1280x800 Lilliannascreenresolution
Graphics- none(Integratedgraphics64MB) o 250GBSSD(themain reasonfora laptoptorunasfastaslight)Server-sideSoftware Requirement:
oJava DevelopmentKit(JDK)8oAndroidStudio2020.3.IoFirebaseDatabase

Client-sideHardwarerequirements:

- AfastspeedUSBcable
- AndroidPhoneforTesting(VersionIl/10/9)

VII. TO DEVELOP THIS PROJECT VARIOUS SOFTWARE ARE USED

- FrontEnd-XML
- BackEnd-FirebaseBrowserBased

- Technology-Android
- Code-BehindLanguage-Java
- IDE-AndroidStudio

VIII. IMPLEMENTATION

Theproposedsystemis implementedusingthe followingtechnologies-

- Programing language: Python, web Sockets, Firebase
- Framework:Node.js,ReactNative,Firebase
- DeepLearningModel:RNN,CNNandseq2seq
- 4-Frontend: HTML, CSS, JavaScript

IX. RESULTS

ThedevelopmentandtestingoftheChatWingsapplicationsuccessfullymetthecoreobjectivesofbuilding a secure, user-friendly, and real-time messaging platform. Key results include:

- Real-Time Messaging:Achievedsmoothandinstantaneoustextandmultimediacommunication using WebSocket technology.
- Cross-PlatformCompatibility:Deliveredaconsistentuserexperience
- PositiveUserFeedback:Betatestingusersreportedhighsatisfactionwiththeapp'sspeed, design, and ease of use.

X. APPLICATIONS

Theapplicationwillbeusedinvariousreal-worldsuchas-

- Personalcommunication
- Business communication
- Customerservice
- SocialMedia
- Healthcare

XI. ADVANTAGES OF THE PROPOSED SYSTEM

- Real-timecommunication
- IncreasedProductivity
- Enhancedcollaboration
- Improvedcustomersupport
- Secureandprivate
- User-friendlyinterface
- Scalability
- Cost-effective

XII. LIMITATION

Therewillbeseverallimitationordifficultyofthischattingapplicationwhichareasfollows-

1) SECURITY RISKS

This is the main problem to secure our data from unauthorize person over the internet such as databreach,hacking,andphishingattacks.

2) DEPENDENCEONTHEINTERNET

To runtheapplication,wewillneedtheinternetconnectionorwecansaythatitisdependupon theinternettocommunicatetotheothers.

3) MISUNDERSTANDING

Inthisapplication,itwillalsoleadtomisunderstandingandmiscommunications.

4) DATASTORAGE

Inthis,wewillchallengethestoringproblemandalsoconcernsaboutsecurityandprivacyof datastoredinthechattingapplication.

5) LIMITEDFEATURES

Inchattingapplicationmayhavelimitedfeaturesthatmaynotuserrequirement.

6) COMPATIBILITY

Chattingapplicationmayhavecompatibilityissuesespeciallywhenusedonthedifferent platforms.

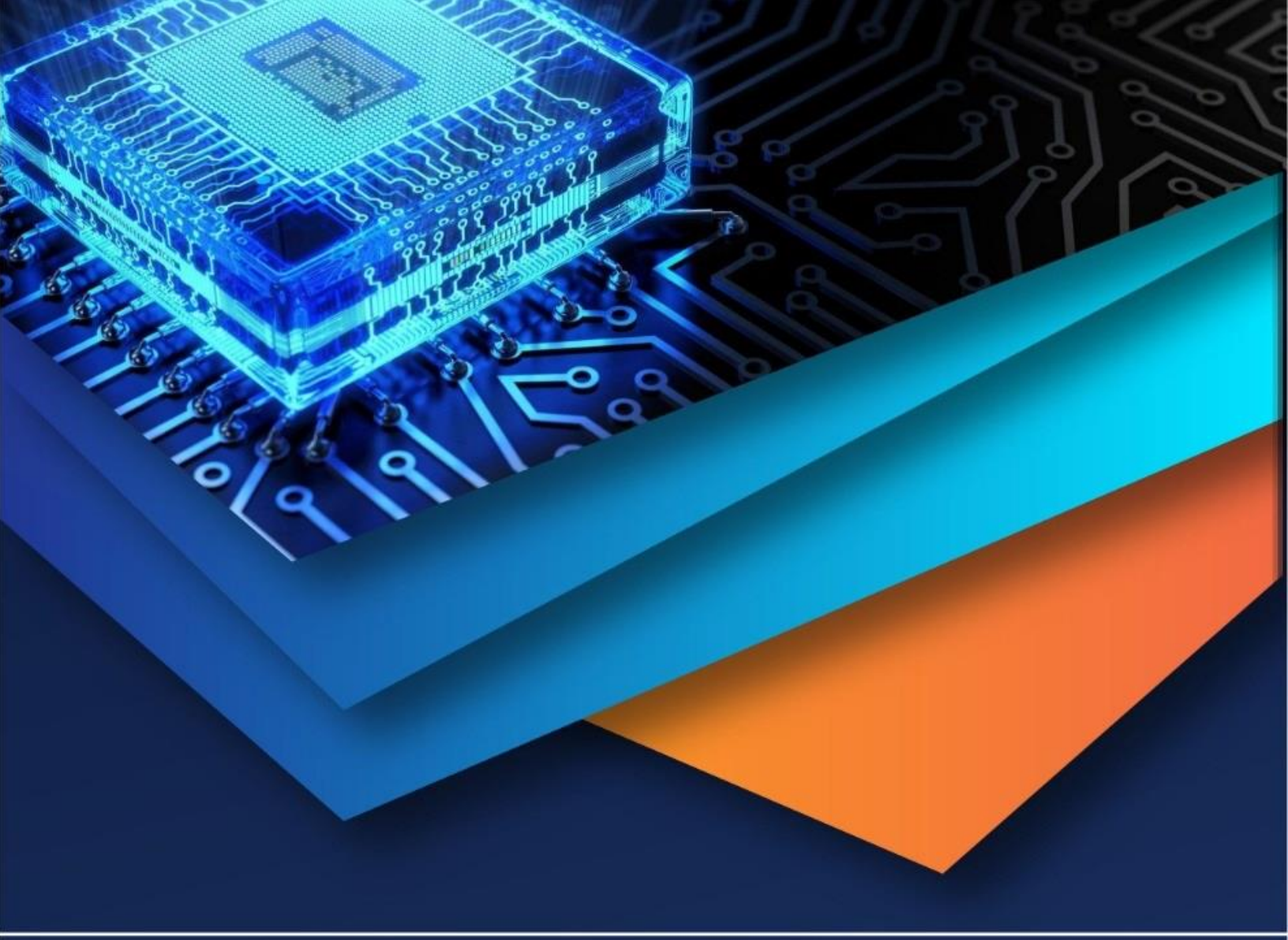
XIII. FUTURE SCOPE

Followingmodificationorupgradescanbedoneinsystem.

1) Morethanonecompanycanbeintegratedthroughthissoftware.
2) Webservicescanbeusedtoknowexactdonationstatusofpackets.
3) Clientcanchecktheirdonationdeliverystatusonline.

XIV. CONCLUSION

AtthelasttheConclusionofprojectistodevelopamobileapplicationwhichthehelpprogrammertogethelpfromthesite,sothattheycandeveloptheirprojectandapplicationDifferentTechnologiesandmakeagroupofProgrammer.AGroupisasocialunitofanysizethatsharescommonvalues,ideasandcode and queries.The portal doesn’t 't havetobeexpensive.Itsupportsmultipleprogrammergoals.
ChattingisnotonlyaApp portal;Itisaliveproductofboardof technicaleducation. In futurewewill add more features on it.



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