GST BILLING APP WITH INVOICE DOWNLOAD USING ANDROID

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Abstract: In recent years, the introduction of the Goods and Services Tax (GST) has had a significant impact on the Indian economy. The GST is a comprehensive indirect tax levied on the supply of goods and services across India, and it has replaced a complex web of indirect taxes that were levied at both the state and central levels. To further simplify the compliance process and enhance the user experience, the government of India has developed a mobile application for GST. Here we are creating a GST mobile application that is a user-friendly and convenient tool for taxpayers, which provides a host of features and services related to GST. The app offers a variety of services, including registration for GST, filing returns, and tracking the status of refund claims. It also provides information related to GST rates, which can be accessed through its user-friendly interface. One of the most useful features of the GST mobile application is the GST calculator. The calculator is a simple and efficient tool that allows taxpayers to calculate the GST payable on their transactions. It can be used for both intra-state and inter-state transactions, and it takes into account the applicable GST rates and input tax credits. Another useful feature of the GST mobile application is the GST calendar, which provides important dates related to GST compliance, such as the due date for filing returns and making payments. The app has a user-friendly interface, offers a variety of services, and provides important information related to GST. Its features such as the GST calculator and GST calendar make it a must-have tool for all GST registered taxpayers. Overall, the GST mobile application is a significant step towards more efficient and transparent taxpayers in India.

Index Terms - Android, GST, Adapter, SQLite Database, Uri Matcher.

I. INTRODUCTION

Android Studio is the official coordinates advancement environment for Google's Android working framework, built on JetBrains' IntelliJ Thought program and outlined particularly for Android advancement. It provides a comprehensive set of tools and features that enable developers to design, develop, and test Android applications efficiently. With the implementation of Goods and Services Tax (GST) in many countries, including India, the need for accurate and efficient GST calculations has become crucial for businesses and individuals alike. To simplify this process, various mobile applications have been developed to help users calculate GST amounts quickly and accurately. Android Studio is based on the IntelliJ IDEA IDE and is specifically tailored for Android app development. These GST calculation apps for Android devices have gained popularity due to their convenience and ease of use. GST calculation apps are designed to handle the complex tax structure of GST, including different tax rates for different goods and services. These apps allow users to input the price of a product or service and calculate the GST amount, including both the CGST (Central GST) and SGST (State GST) components. Some apps also support the calculation of IGST (Integrated GST) for inter-state transactions. Overall, it is important to note that the development process may vary depending on the specific requirements and features of your GST mobile app. Additionally; integrating GST-related functionality might involve working with appropriate APIs or web

services provided by GST authorities or third-party providers. Remember to refer to official Android documentation, online tutorials, and relevant resources while developing your GST mobile app in Android Studio.

II. LITERATURE SURVEY

Girish Garg detailed the Goods and Services Tax [1]. He discussed the GST concept, including its challenges, opportunities, highlights, and impact on India. This led to the conclusion that GST is one of India's largest expenditure modifications, increasing assessment accumulations and the country's overall economic growth. The author's Gupta, Rahul, Cheshtha Kapoor, and Jayesh Yadav.[2] derives " Faceless, Paperless, Cashless". Digital India' may be a lead program of the government of India that envisions India as a carefully enabled information economy. As India rises a worldwide competitor in inventive population-sale installment frameworks, different computerized installment strategies have been presented nation-wide, counting Small scale ATMs, Keeping money Cards, Web Managing an account, UPI (Bound together Installment Interface), Portable Keeping money, and Portable Wallets. The author Ghosh, Gourab [3] says that, the growth in smart phone and access to internet made life easier for the people and which gave advent to digitalization. Digitalization not only improved trade and commerce but it also made transaction of payment smooth and fast Manvita Joshi [4] says that to provide secure monetary transactions and credit office among one's associates without any impedances from the bank, an activity was taken to create a mobile-phone based online keeping money framework with the objective to protect the simple users against fraudulent activities. A virtual banking environment was created to carry out all the transactions.

The mobile app acts as a middleman between the bank and the users ensuring high-level security. [5]. Yuvaraj, S., and N. Sheila Eveline said that money is often said to as the lifeblood of every economy. Cash transactions are now easier because to the internet, smartphones, and other digital technology. The majority of transactions in the current environment are cashless, and physical currency will lose its dominance in the future. Different platforms have been developed to conduct cashless transactions. [6]. Miruna,S.Lyrics. (2019)With the introduction of smartphones, technology has played an increasingly important part in this, changing the way we transact in daily life and making life easier by allowing all payments and transactions to be completed online. This opened the door for the development of the having a digital wallet platform. [7]. Cherukur, Mr. (2020) the current survey focuses on how satisfied customers are using mobile wallets. The aspects that affect a customer's pleasure when using a mobile wallet are examined in this study. Nowadays, everyone makes daily purchases utilising their smartphones and mobile wallets. Mobile wallets have a significant social influence. To determine their levels of satisfaction, a survey of mobile wallet users is used to carry out the current study. Dewi Sandy Islamiati[8] In this paper, a payment system was tested on local e-commerce applications, the system was built on mobile applications and web services with the REST API, versatile applications as clients and web administrations as servers. The test was carried out by assessing the execution of the installment framework for thirty clients in seven days, the comes about of this investigate appeared that the execution of the installment framework and the confirmation prepare of payment framework. [9]Sometimes the government officls also do corruption at the time this GST billing app is very helpful for users for directly know the taxes and all the things without any one help. [10].Anshari, Muhammad, et al. (2021)the use of e-wallets might improve financial institutions' productivity and open the door to new services for clients' convenience. The younger generation has adapted well to these payment applications with simple transactions and payments, it greatly pleases the customers. [10]

III. EXISTING SYSTEM

In terms of how they function and provide efficient administrations, the GST financial division has seen significant changes over the last few of decades. Increased business burdens the current financial system generally. As a result, this will increase the number of clients, and online transactions, and produce a significant amount of information when handling a sizable portion of clients. Banks in the United States and other countries are presently using Big Data Analytics (BDA) to regularly tackle this situation. It looks for various examples in its GST databases and gathers advantages for its organizations. It is astounding, but also clear that the majority of Indian banks haven't utilized the information they've stored in their databases because of a few difficulties including availability, bringing time, and so on. Before 2020, information experts predicted a significant increase in the amount of GST information, measured in Petabytes and Exabytes. This is the actual amount that was used to store the GST data in our banks during the last ten years.

Limitation of existing system

1. Traditional techniques using calculate GST amount are costly, imprecise, and time-consuming.
2. Does not address GST value fraud detection since they do an analysis after it happens.
3. Huge amounts of GST data are available, fraud attempts and other crimes are rising.

IV. PROPOSED SYSTEM

In business GST process is a crucial activity that can span a series of fraud schemes and not getting the proper GST amount from the account sector and government office alike. In this situation, this GST app is very important for business people and small-scale traders also, Although this project has many facilities easy layouts, and methods to calculate GST amount, preventing false GST values and You may add products and goods to the system, add users and customers, and generate as much invoices, receipts, and bids as you need. Generate invoice receipts PDF support, if you are paying the GST amount then they can shown on one page, and if you are not paying the GST amount they will show the another page. So you can easily remember or identify if the user is paying the GST amount or not also download the GST data sheet in PDF format date-wise or user-wise ID. The main advantage of this GST app is there is no admin is there. Users can enter all the details, just check that the registration details and product details are correct or not.

In this GST billing app, the software is Android Studio, it is an integrated development environment (IDE) specifically designed for developing Android mobile applications. It provides a comprehensive set of tools and features to help developers design, build, and debug Android apps more efficiently. Using the app can potentially reduce costs associated with GST compliance by streamlining processes and minimizing the need for manual paperwork and in-person visits to tax offices. The app allows users to access GST-related services anytime and anywhere using their mobile devices. This convenience is particularly useful for business owners and taxpayers who need to manage their GST compliance on the go. The app enables quick filing of GST returns and payments, reducing the time and effort required compared to traditional methods. This efficiency can lead to faster processing and fewer errors in filing. This software has mainly two phases one is the design phase and another is the coding phase, in designing uses XML language, and coding uses Java language. Android Studio is the official IDE for Android app development and is widely used by developers worldwide. It continues to evolve with regular updates and improvements to support the latest Android SDKs and tools.

4.1 How to Create GST App in Android Studio?

A strong and complex improvement environment, Android Studio was made particularly for making, testing, and bundling Android applications. It is accessible for download in a single bundle with the Android SDK. It may be a set of gear and parts. Such utilities are as often as possible upgraded & introduced independently from one another. To create mobile apps in Android Studio, you can follow these steps:

1. Introduce Android Studio: Download and introduce the most recent adaptation of Android Studio from the official site (https: //developer.android.com/studio). Make beyond any doubt your computer meets the framework necessities for Android improvement.Set up the Android Development Environment:
2. Launch Android Studio and follow the setup wizard to install the necessary components, including the Android SDK, emulator, and required tools.
3. Create a New Project: Once Android Studio is set up, click on "Start a new Android Studio project" or select "File" > "New" > "New Project." Provide the necessary details such as application name, package name, and location for your project.
4. Choose Project Template: Android Studio provides various project templates to start with. Select the one that suits your app idea, such as "Empty Activity" or "Basic Activity."
5. Design the User Interface: Android Studio provides a visual editor called "Layout Editor" that allows you to design the user interface of your app. You can drag and drop components, arrange them, and customize their properties.
6. Write Code: Android Studio uses Java or Kotlin as the programming language for app development. You can write your app's logic by implementing various functionalities using these languages. For example, you can handle button clicks, retrieve data from APIs, or store data in a local database.
7. Test Your App: Android Studio provides an emulator to test your app on virtual devices with different configurations. You can create virtual devices or connect physical devices for testing. Run your app using the emulator or connected device to ensure it functions as expected.

8. Debug and Fix Issues: If you encounter any issues or errors, Android Studio offers a debugging environment to identify and fix problems in your code. Utilize the debugging tools to step through your code, inspect variables, and track down issues.

9. Build and Generate APK: Once your app is ready, you can build it by selecting "Build" > "Build Bundle(s) / APK(s)" from the menu. Android Studio will generate an APK (Android Package) file, which is the installation file for Android apps.

10. Distribute Your App: You can distribute your app through various channels, such as the Google Play Store or other third-party app stores. Prepare necessary assets like app icons, screenshots, and descriptions, and follow the guidelines provided by the respective distribution platform.

4.1.1 Advantage of Proposed System

1. The app shows the exact amount of a product and how much is the GST value of each product.
2. Use of algorithm to figure the two GST value (Central GST, State GST).
3. There is no charge for user registration also no fare for calculate the GST tax.
4. Decrease the illegal activities or fraud attempt to continuous monitoring
5. Don't want anybody's help; User can use this app anywhere and anytime.
6. Whenever user want the GST data, that time user can download the details in PDF format and share anywhere.
7. Use this app to e-tax, e-governs, e-commerce, block chaining, bitcoin etc...

4.1.2 Advantage of Proposed System

1. Effecting a change in GST calculation structure, staffing, or style of an organization.
2. in this app to designing a new version to enumerate the GST tax in the business sector.
3. Developing or acquiring a new or modified information app and also running any e-commerce system.
4 This app Implementing a new secure and meticulous GST tax business procedure or process.

V. SYSTEM ARCHITECTURE

1. This mobile app is intended for business leaders, small-scale vendors, and citizens who pay revenues.
2. The user is the only module that developed this app; the rest of the task is completed automatically by the app.
3. In GST, each user can register with their Customer Name, shop license, and mobile number. In this moment, the app automatically checks whether the customer's mobile number is the same or different; if it is the same, the app has not registered user data. Then the tax payer can login with their Tax payer ID (customer name) and password (mobile number).
4. The taxpayer can view different buttons for the GST tax calculation and payment. These studs are: add product details, Add GST details, Tax view, taxpayer's list, and defaulter's list.
5. One form is shown if the GST taxpayer clicks on add product details. In that form, the user can add the product name, quantity, and price, and also select the tax percentage of that product. After that, click the save button, and the details are saved in the SQL database with the date, time, and ID.
6. After entering the product details, the next button is Add GST Details. On this page, the user can select the correct GST percentage for each product and save the details.
7. If the user enters all the GST details then the app will work automatically to calculate the GST amount for each product and save it in the SqlLite database. It will show how much tax is State GST and how much is central GST.
8. The next clasp is the tax view. This is one of the important pages in this app. On this page, the user can understand how much GST tax is charged on each product and also recognize the total tax percentage and amount (State GST and Central GST) for all the products.
9. Once the user can see the GST tax amount on the tax view page, they can decide if they can pay the tax or not. The two options are there on this page.
10. If the user decides to pay the GST tax, click the payment button, and the user data will automatically go to the bill adapter and be saved in the GST Billing database.
11. Whether the user has completed the GST tax payment, then the name and all the details and payment amount with date are saved in the GST Billing database and it will show in the green layout and others in the red layout.
12. The next two links on the user page are the payer's list and the defaulter's list, if you pay the GST tax amount then your remittance details are shown in the payer's list otherwise it is shown in the defaulter's list.

13. To make this app more efficient for the users, they will get all the details in one click on their mobile through this application.
14. To make this app more efficient for the users, they will get all the details in one click on their mobile through this application.
15. There are so many functions the app can do automatically. The first one is to check user details. Once a user is registered with a mobile number, the same number will not be accepted for the user registration. The user can use a separate mobile number to register the details.
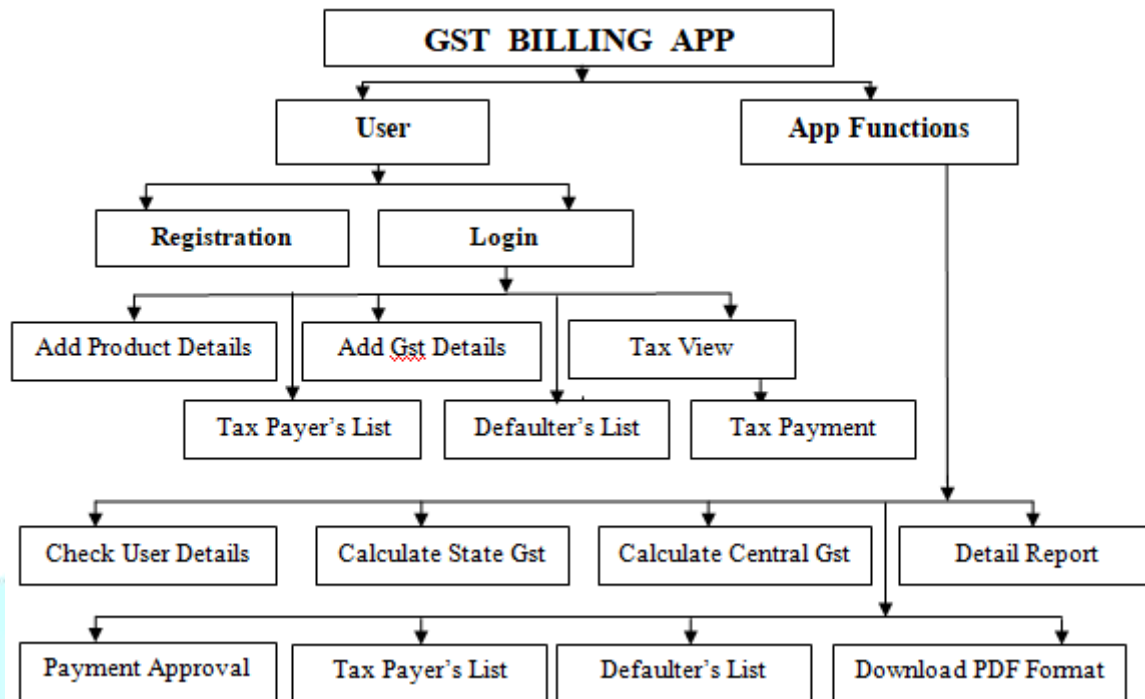
Fig.1 Architecture of GST Mobile App

16. The next two buttons are: Calculate state GST and central GST; these are the predominant functions in this app. If the user adds the product details and also selects the GST, then the app will inevitably calculate how much the state GST and central GST for each product is, likewise it shows the tax percentage of the total product.
17. After all, this app automatically creates a detailed report about these things, which helps the user see and analyze the GST tax of the products and also inspect how much tax is for central and state governments.
18. The user's information will instantly transfer to the bill adapter and be saved in the GST Billing file if they choose to pay the GST tax by tapping the payment button.
19. Next is payment authorization. If the user is going to make cash payment, check the details and give payment authorization. This app is provided here only, and if there is any discrepancy in user payments, the app will not permit to pay GST tax.
20. Payer's list and Defaulter's list are the next two links on the app function; if you have submitted the required quantity of GST tax, your remittance figures are displayed in the payer's list; otherwise, it is showcased in the defaulter's list.
21. The last function of this app is to download the GST tax data in PDF format. The user can download the data anywhere and anytime and also see all the details about the product, understand how much the tax is for each product, and also know how much you pay in state and central GST tax and how much is the balance payment.

VI. ALGORITHM

Algorithms play a crucial role in the GST mobile app like Tax calculation, Invoice matching, User experience optimization, contributing to several key functionalities and features. Here are some of the primary uses of algorithms in the GST mobile app:

5.1 Adapter

Connector in Android acts as a bridge between an AdapterView and the basic information for that see. The Connector gives get to the information things. The Connector is additionally mindful for making a View for each thing within the information set. The connector could be a bridge between the UI component and the information source that makes a difference us to fill information within the UI component.

5.1.1 Bill Adapter

In this GST billing app project, we used the adapter several times the reason is In Android Studio, an adapter is used to populate and manage data in various UI components, such as List Views, Grid Views, and Recycler Views. Adapters act as a bridge between the data source and the UI component, allowing you to display the data in a structured manner. In this GST billing app, we can use adapters in so many times like bill adapters, detail adapters, and save PDF adapters. Adapters help in populating UI components with data from a data source, such as an array, a list, or a database. The adapter takes each item from the data source and converts it into a corresponding view, which is then displayed in the UI component

$$public\ class\ BillAdapter\ extends\ RecyclerView.Adapter < BillAdapter.BillHolder >$$ (5.1.1)

The Connector makes View Holder objects as required and conjointly sets the information for those sees. The method of partner views to their information is called authoritative. After you characterize your adapter, you abrogate key strategies.

onCreateViewHolder() Recycler View calls this strategy at whatever point it should make an unused View Holder.

$$public\ BillAdapter(Context\ mContext, BillItemClickListener\ clickListener, int\ dividerColor)$$ (5.1.2)

A Context gives you access to information about the current state of your Application. It grants access to resource files, pictures, themes/styles, and external directory locations to Activities, Fragments, and Services.

OnClickListener is the object of the setOnClickListener() method. It is used like a thread. When button is clicked, it immediately performed the onClick code to avoid delaying other app's response.

5.1.2 Detail Adapter

Adapters efficiently manage the reuse of views to optimize memory usage and scrolling performance. In a list-based UI component, such as a ListView or RecyclerView, only a limited number of views are created initially. As the user scrolls, the adapter reuses the existing views to display new data, rather than creating new views for each item. This approach helps in improving the performance and reducing memory overhead.

$$public\ class\ DetailAdapter\ extends\ RecyclerView.Adapter < DetailAdapter.DetailHolder >$$ (5.1.3)

It holds the data and send the data to an Adapter view then view can takes the data from the adapter view and shows the data on different views like as ListView, GridView, Spinner etc.

$$public\ DetailHolder\ onCreateViewHolder(ViewGroup\ parent, int\ viewType)$$ (5.1.4)

A View Group is an imperceptible holder that characterizes the format structure for See and other View Group objects, which characterizes a UI format. See objects are habitually called widgets and can be one of various subclasses, such as Button or TextView.

$$View\ view = LayoutInflater.from(mContext).inflate(R.layout.single\_item\_detail\_layout, parent, false);$$ (5.1.5)

The LayoutInflater lesson is utilized to instantiate the substance of organize XML records into their comparing See objects In other words, it takes an XML record as input and builds the See objects from it. "Blowing up" a see implies taking the format XML and parsing it to form the see and viewgroup objects from the components and their attributes indicated inside, and after that including the chain of command of those sees and viewgroups to the parent ViewGroup.

5.1.3 Save PDF Adapter

Adapters provide flexibility in customizing the appearance of each item in the UI component. You can create a custom adapter that inflates a layout XML file for each item, allowing you to design the item's visual representation according to your requirements. This enables you to have different layouts or styles for different items within the same UI component. Adapters can be used in conjunction with data binding libraries, such as Android Data Binding or Jetpack Compose, to bind data directly to the UI components. This simplifies the code and eliminates the need for manual view manipulation.

$$public\ SavePDFAdapter(Context\ mContext, Cursor\ mCursor) \qquad (5.1.6)$$

A Cursor speaks to the result of an inquiry and focuses to one push of the inquiry result. This way Android can buffer the inquiry comes about proficiently; because it does not have to stack all information into memory. To urge the number of components of the coming about inquiry utilize the getCount() strategy.

5.2 SQLite Database

SQLite is a popular choice for local data storage in Android applications because it offers a lightweight, embedded database solution. Here are some reasons why SQLite is commonly used in Android Studio.

5.2.1 Billing Database

Create a new Java class that extends the SQLiteOpenHelper class. This class will handle database creation, version management, and other database-related operations. This GST app uses SQLite database in different ways, here we can create a database to save user details. SQLite is included as a part of the Android framework, so there is no need to download or configure additional libraries. It is readily available and can be used directly in this GST billing app.

$$private\ static\ final\ String\ DATABASE\_NAME\ =\ "GSTBillsDB.db"; \qquad (5.2.1)$$

A portable database could be a database particularly expecting for enduring information in versatile applications, frequently on the gadget itself as neighborhood capacity. This utilization of nearby capacity permits the app to proceed to work indeed when the gadget is offline or used as a cache for stacking information within the occasion of a moderately organized network.

$$super(context, DATABASE\_NAME, null, VERSION); \qquad (5.2.2)$$

Make a partner question to form, open, and/or oversee a database. This strategy continuously returns very rapidly. The database isn't made or opened until one of get Writable Database() or get Readable Database() is called.

$$public\ void\ onCreate(SQLiteDatabase\ db) \qquad (5.2.3)$$

Open unique void onCreate(SQLiteDatabase db): This strategy is called as it were once you create a database for the first time. open unique void onUpgrade(SQLiteDatabase db, int old version, int new version): This strategy is called when the database must be updated.

$$db.execSQL(CREATE\_TABLE); \qquad (5.2.4)$$

ExecSQL(String, Question[]) Execute a single SQL explanation that's NOT a SELECT/INSERT/UPDATE/DELETE. ExecSQL(String) Execute a single SQL explanation that's NOT a SELECT or any other SQL explanation that returns information.

5.2.2 Customer Billing Entry Database

SQLite provides support for relational database features such as tables, columns, indexes, and SQL queries. It allows you to define database schemas and relationships between tables, making it easier to organize and query data. SQLite supports transactions, which allow you to group multiple database operations into a single atomic unit.

$$public\ static\ final\ Uri\ CONTENT\_URI$$
$$=\ BASE\_CONTENT\_URI.buildUpon().appendPath(PATH\_BILLS).build(); \qquad (5.2.5)$$

You frequently utilize ID values after you retrieve a set of lines and after that need to upgrade or erase one of them. The Uri and Uri. Builder classes contain helpful strategies for constructing well-formed URI objects from strings. Adds the substance of the required way question to the path. A construct could be a form of a program that, as a run the show, maybe a pre-release form and is recognized by a construct number instead of by a discharge number. A computer program construct could be a set of executable code that's prepared for utilization by clients.

5.2.3 Payment Database

SQLite has been around for a long time and has a proven track record of stability and reliability. It is extensively used in mobile applications and has a large community of developers providing support and

resources. Overall, SQLite offers a convenient and efficient way to store and manage local data in Android applications, making it a popular choice for developers using Android Studio. SQLite databases are optimized for local data storage and retrieval. It offers fast read and write operations, allowing for efficient data access and manipulation. SQLite databases are compatible with various platforms and programming languages, making it easy to share data across different systems.

$$public\ class\ GSTBillingContentProvider\ extends\ ContentProvider \qquad (5.2.6)$$

Content suppliers can offer assistance an application oversee get to to information put away by itself or put away by other apps and give a way to share information with other apps. They typify the information and give components for characterizing information security.

$$private\ static\ final\ UriMatcher\ sUriMatcher\ =\ buildUriMatcher(); \qquad (5.2.7)$$

UriMatcher is a handy class when you are writing a ContentProvider or some other class that needs to respond to a number of different URIs. In your example, a user could query your provider with URIs such as: myprovider://cte. or myprovider://cte/somestring.

VII. FEASIBILITY STUDY

In order to choose the optimal system that satisfies performance criteria, a feasibility study is carried out. Conduct includes an identification description, an evaluation of conceivable systems, and the choice of the best system that meets constraints. A system's needed performance is established by an expression of constraints, the identification of the precise system objectives, and a description of outputs. The analyst is then prepared to assess whether proposed systems are capable of supplying these outputs. In the feasibility analysis, there are three vital variables.

8.1 Economic Feasibility

The main objective of an economic feasibility study (EFS) is to show the overall value of a proposed project before funding or benefits for software or hardware are accepted or distributed. This is done by weighing the costs and benefits to the agency, other state agencies, and the general public. Economic sustainability is the ability of a project under consideration to generate financial gains. There must be a benefit-cost analysis. Furthermore, a breakeven analysis may be used to assess a project's economic viability. The tangible and intangible aspects of a project must be converted into economic terms in order to allow a consistent foundation for evaluation. Even when a project is non-profit in nature, economic viability is crucial.

This app tests the new system's functionality. The system is examined in this context to see whether the new technologies suggested could be successfully deployed. To the best of our knowledge and in light of the data below, a financially and economically feasible strategy for analysing GST tax calculation.

8.2 Technical Feasibility

The analysis of a project's technical needs to determine the technical resources needed is known as technical feasibility. Technical feasibility is not complete until the firm has undergone the same technical evaluation to determine that it possesses the technical capability to implement the project to completion within the required timeframe. It concentrates on the hardware and software that can be employed for a project. The programming language, hardware resources, additional software tools, etc. make up this level of technology. Figure 2 the technological viability of this project is determined by calculate the GST tax app, a mobile app programme for calculating and analyses GST tax from a database or dataset source. This app tests the new system's functionality. The system is examined in this context to see whether the new GST tax billing technologies suggested could be successfully deployed. Based on the information below and to the best of our knowledge, a system for calculating the state and central tax and monitoring the tax data also the user can download the GST tax data set these things are technically and economically possible.

Fig.2 GST User Data and More Options

8.3 Financial Feasibility

Financial viability includes the GSTbillingappproject management team's capacity to raise the necessary finances to carry out the suggested project.If necessary, further financial feasibility factors should be considered, including company, credit worthiness, loan availability, smallscale and retail marketing, grocery shopping, equity, and loan schedule.The financial feasibility analysis alsoexamines the implications of land purchases, leases, educational goals, medical fields, and other legal financial challenges. Figure-3, this GST billing software tests the effectiveness of the new system. In this scenario, the system is examined to determine whether the new technologies suggested might be deployed successfully. To the best of our knowledge and based on the information below, the GST billing software is technically, commercially, and monetarily possible.

Fig.3 GST Taxpayer's List

8.4 Preventing Cyber Attacks
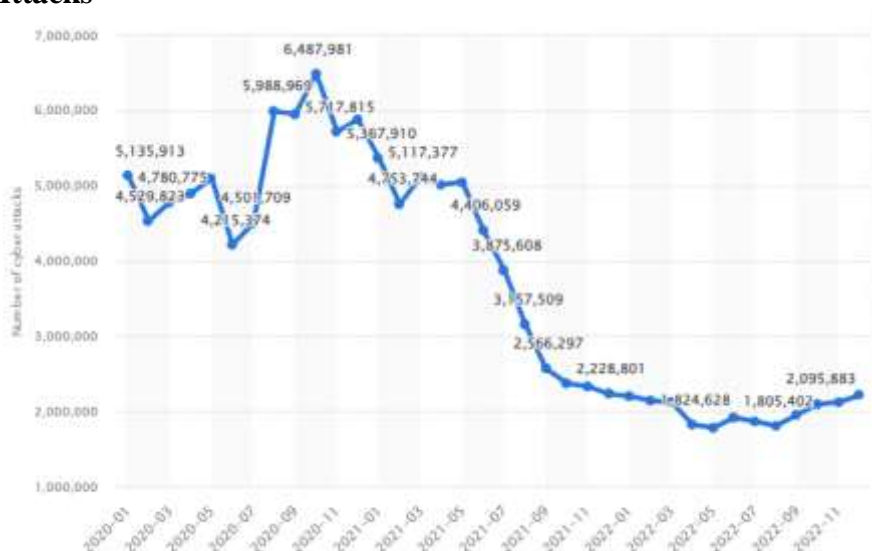
Fig4. Graph for Number of mobile cyber attacks against users worldwide

The most relevant and important element of this evolution is where we can look into how exchange behavior might identify misrepresentation. Figure 4 says that when extortion is discovered, the money is frequently lost forever or the chance of fully recovering the loss is extremely slim. Aside from that, investigating cheats, particularly those involving massive global jobs, is expensive and tiresome. However, if the focus is on misrepresentation prevention, all the financial losses, time, and effort needed to duplicate dishonest transactions, find the offender, and recover missing assets can be avoided. Here the user directly adds our data in this GST billing app, so that time no other person help doesn't want. If a second person or an officer is in the middle of this process any fraud attempt or corruption may happen. This GST billing app software prevents this illegal thing and users get hundred percent accurate data for how much GST each product and the total GST percentage of all products and also ensures how much GST amount the user can pay the state and central government for the GST purpose. So, users can know everything about this software and also prevent fraud attempts.

VIII. RESULT & CONCLUSIONS

Fig.5 GST Invoice with SGST & CGST

Using a GST billing software developed in Android Studio can offer several benefits for businesses and users alike. GST billing software can automate the invoicing process, making it faster and more efficient. It can calculate the GST amounts automatically, reducing the chances of errors and saving time for both businesses and customers. With GST billing software, the tax calculations are accurate as per the prescribed GST rates. Figure 4 this app helps in maintaining compliance with tax regulations and avoids any discrepancies. The app can store all invoice data, making it easy to access and manage past billing information. This data can be valuable for accounting, reporting, and analysis purposes. Businesses can get real-time reports on sales, taxes collected, outstanding payments, and more. These reports provide valuable insights for decision-making and financial analysis. Android Studio allows developers to create a user-friendly and intuitive interface for the GST billing software. This makes it easier for users to navigate and use the application. Android is a widely used mobile operating system, and having a GST billing software on Android makes it accessible to a large user base. Businesses and users can access the software from their smart phones and tablets, enabling on-the-go invoicing.

Using GST billing software can lead to cost savings in the long run by streamlining the billing process and reducing manual efforts. Quick and accurate billing with GST details can improve customer satisfaction. It provides transparency in pricing and reduces any potential confusion. Overall, a well-designed GST billing software in Android Studio can streamline billing processes, reduce errors, improve data management, and help businesses stay GST-compliant, leading to increased efficiency and better customer experiences.

IX. ACKNOWLEDGMENT

REFERENCES

[1] Girish Garg, "Basic Concepts and Features of Good and Service Tax In India", International Journal of scientific research and management (IJSRM) Volume: 2, 2014.

[2] Gupta, Rahul, Cheshtha Kapoor, and Jayesh Yadav. "Acceptance Towards Digital Payments and Improvements in Cashless Payment Eco system "2020 International conference for Emerging Technology (INCET) IEEE,2020

[3] Manvita Joshi . "A Mobile App for Safe and Secure Monetary Transactions" International Conference on Computational Performance Evaluation (ComPE) IEEE 2021

[4] Ghosh, Gourab (2021) Adoption of digital payment system by consumer Issue 2 February 2021

[5] Yuvaraj, S., and N. Sheila Eveline. "Consumers' perception towards cashless transactions and information security in the digital economy "International journalof Mechanical Engineering and technology 9.7 (2018):89-96

[6] Miruna, S. Lyrics. "A Study on Customer Satisfaction towards E-Wallet in Tirunelveli City."International journal of all research writings 2.1 (2019) 3-6.

[7] Cherukur, Mr. "A study on customer satisfaction on e-payment applications "Journal of Contemporary issues in Business and Government 26.2 (2020): 920-926.

[8] Dewi Sandy Islamiati "Design and Implementation of Various Payment System for Product Transaction in Mobile Application" International Electronics Symposium (IES) 2019

[9] Central GST SP caught by Vigilance while taking bribe Read full news at https://keralakaumudi.com/en/news/news.php?id=1086225&u=central-gst-sp-caught-by-vigilance-while-taking-bribe.

[10] Anshari, Muhammad, et al. "Factors influencing individual in adopting Financial services Marketing 26.1 (2021):10-2