



OPEN SOURCE CODING

OPSC7312

POE PART 1

NOTEFY

A NOTE TAKING APP

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RESEARCH

Introduction

Effectively gathering, organising, and retrieving information is more crucial than ever in the fast-paced digital world of today. With note-taking applications, users can easily manage their thoughts, ideas, and activities across several devices, making them indispensable tools for both personal and professional use. These applications, which offer a wide range of features tailored to different user needs, are crucial for boosting organisation and efficiency.

Three well-known note-taking applications for Android—Evernote, Google Keep, and Microsoft OneNote—will be examined and analysed in this paper. These applications each cover different aspects of note-taking and information management and have unique functionality. Based on what is currently known about Android application development, the analysis will give an overview of each app, go over its advantages and disadvantages, and offer suggestions for how these apps might have been made with Android Studio. Additionally, these applications will be compared in order to highlight their best features and pinpoint those that could be included in the development of a brand-new, all-inclusive note-taking app. The purpose of the paper is to draw conclusions regarding the best practices and features for creating an application that takes notes and is both successful and easy to use.

Research

1.Evernote Overview

Since its launch in 2008, Evernote, a feature-rich note-taking tool, has dominated the digital note-taking market. It allows users to record and arrange a wide range of content, including voice notes, text, images, and web clips. Users of Evernote may read their notes from any device, including PCs, tablets, and smartphones, thanks to cross-platform syncing. It is suitable for both personal and professional use because to its powerful organising capabilities, which include notebooks, tags, and an advanced search engine. (2019, Prokopets)

Strengths

- **Multi-Device Synchronization:** Evernote excels in syncing notes across multiple devices, ensuring that users have access to their information wherever they go.
- **Rich Media Support:** Users can include photographs, audio recordings, PDFs, and other attachments in their notes, making the program extremely versatile.
- **Powerful Search:** Evernote's search tool can detect text within photos and PDFs, making it easier to identify specific content.
- **Organizational Tools:** Users can organize their notes into notebooks and further categorize them with tags to keep information structured and accessible. (Prokopets, 2019)

Weaknesses

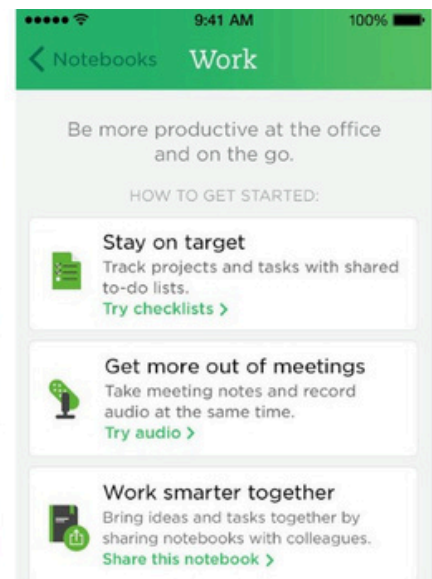
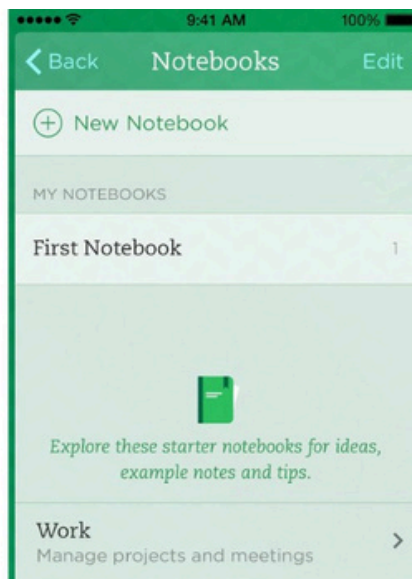
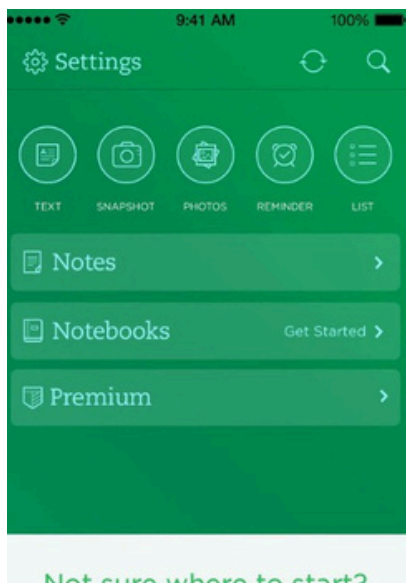
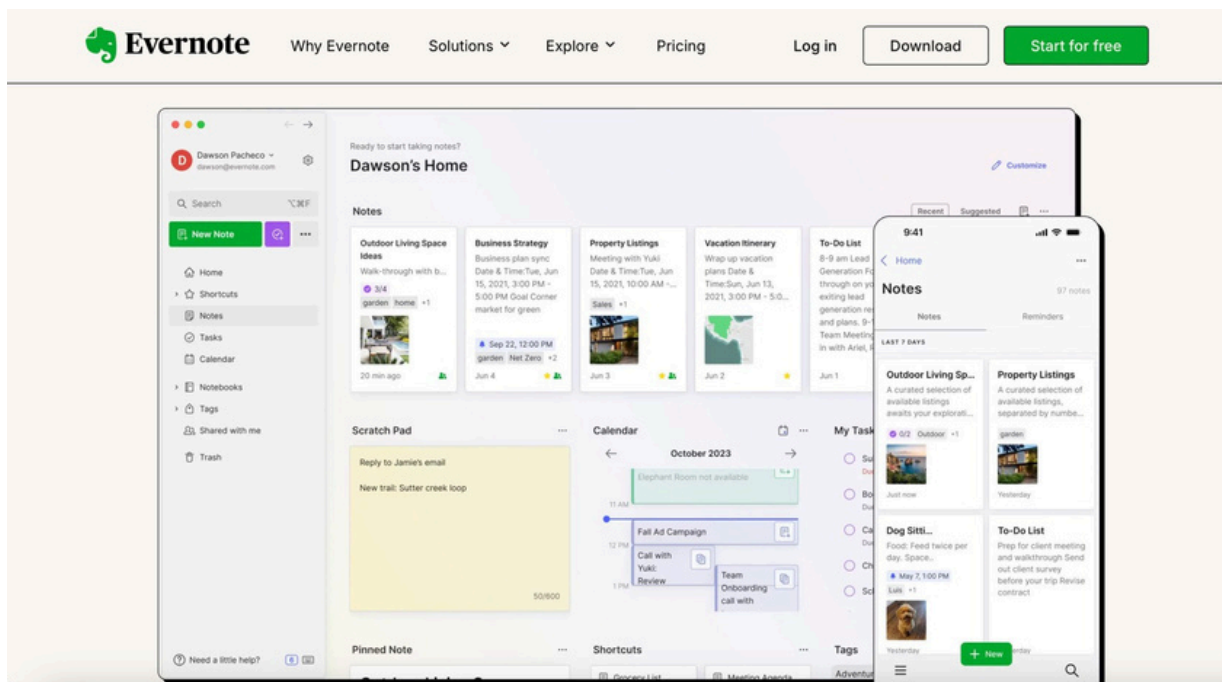
- **Cost:** Many of Evernote's advanced features need a premium subscription, which can be a negative for users looking for a free alternative.
- **Complexity:** The app's numerous capabilities can be intimidating for new users searching for a basic note-taking solution.
- **Some users have experienced occasional synchronization issues, raising worries about data consistency across devices. (Prokopets, 2019)**

Implementation

Several cutting-edge technologies will probably be used in the deployment of Evernote. Usability and accessibility are given top priority in the app's user interface, which was designed utilising Android Studio's UI design tools and features a simple, easy-to-use layout. Device synchronisation is probably handled by cloud services, and data is stored and retrieved through a backend system, possibly with the use of APIs like Google Cloud Storage for stability.

The application's search feature might recognise text in images and PDFs using optical character recognition (OCR) technology, which would require interaction with an OCR engine. The fact that Evernote can manage a wide variety of media types demonstrates that the application has a modular architecture, with several components handling various types of material (text, images, audio, etc.). (2019, Prokopets)

Screenshots





Your Evernote

Tuesday, 30 April 2024

Find any note, task or document



+ New note

+ New task



Camera



Scan



Files



Audio

Scratch Pad



Minx harness
Dillon TP LINK
Invideo



Create



Notes



Shortcuts



Tasks



Calendar



2. Google Keep Overview

Google Keep is a lightweight note-taking app that puts an emphasis on usability and simplicity. Its 2013 introduction and seamless integration with other Google services make it a desirable choice for customers who are already acquainted with the Google ecosystem. With Google Keep, users can quickly create colour-coded notes, lists, voice recordings, and reminders that are easy to find. All notes are quickly synced to Google Drive, and it is accessible on multiple platforms, including the web, iOS, and Android. (Delfino, 2022)

Strengths

- **Simplicity:** Google Keep's basic interface allows users to easily jot down notes or create lists without adding extra complication.
- **Voice Notes:** The program lets users take voice notes, which are then instantly converted into text for added convenience.
- **Integration with Google Services:** Google Keep works with Google Drive, Google Calendar, and Google Assistant to improve its functionality within the Google ecosystem.
- **Collaboration Features:** Users can share notes with others, allowing for real-time collaboration on lists and ideas. (Delfino, 2022)

Weaknesses

- **Limited Organizational Tools:** Unlike Evernote, Google Keep lacks complex organizational capabilities like notebooks and tags, making it difficult to manage a big collection of notes.
- **Basic Search Functionality:** Google Keep's search capabilities are somewhat basic, lacking the complex functionality available in other note-taking apps.
- **Formatting Limitations:** Google Keep has few text formatting options, which may be a disadvantage for users wishing to make more structured notes. (Delfino, 2022)

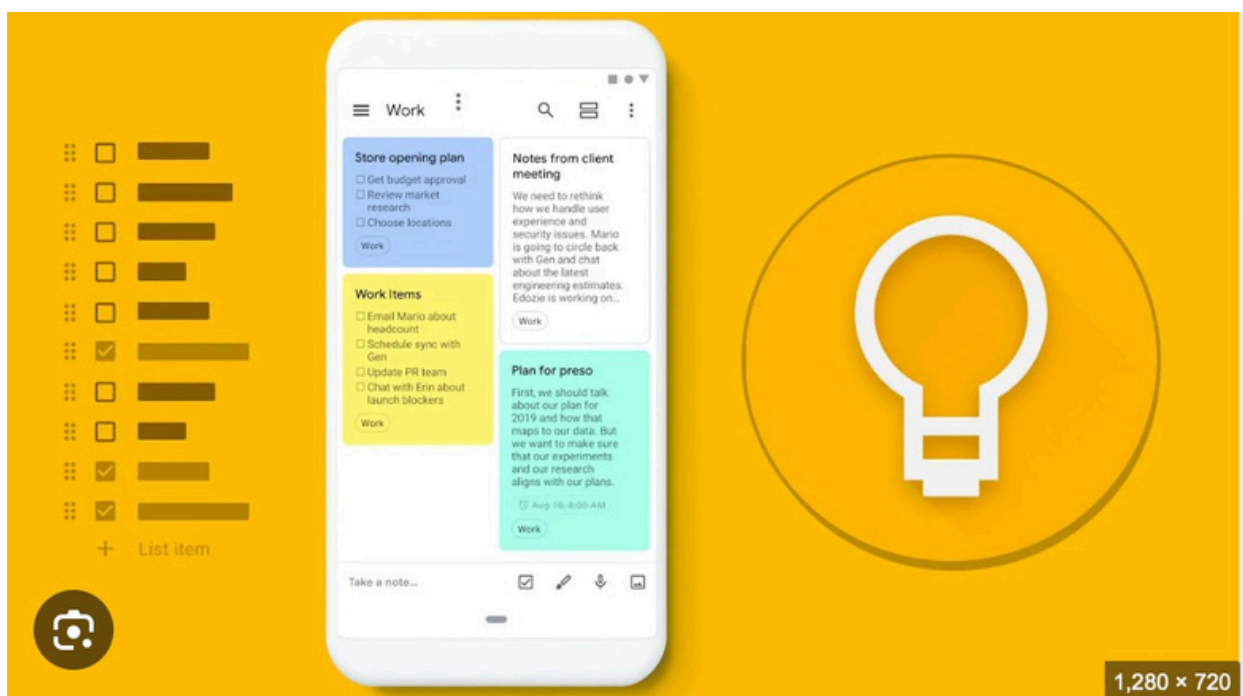
Implementation

It's possible that Google Keep was created with a strong focus on simplicity and efficiency. The user interface of the app is simple and easy to use because it adheres to Google Material Design standards. Because of its extensive cloud infrastructure, Google's Firebase technology is probably what powers Keep's synchronisation feature.

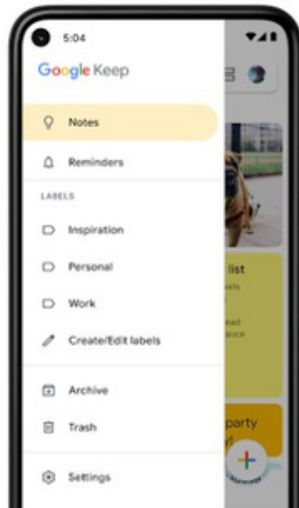
real-time data synchronisation, which guarantees that all devices' notes are updated instantly.

Google's speech-to-text API, which enables smooth voice identification and transcription, is probably the foundation for the app's voice note functionality. Additionally, we would incorporate Google Keep's lists and reminders feature into our project. Its integration with other Google services also necessitates the usage of Google's APIs, which facilitate the retrieval of data from Google Assistant and Calendar. (Delfino, 2022)

Screenshots



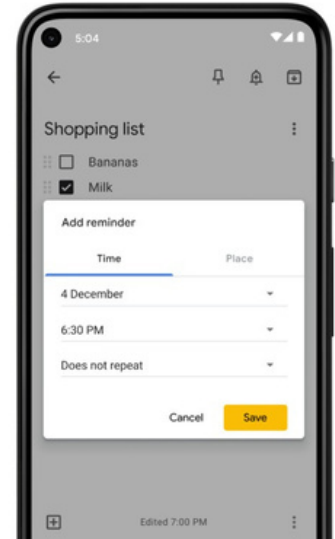
Stay organized
with labels



Capture ideas at a
moments notice



Set reminders
to stay on track



3. OneNote Overview

A feature-rich note-taking application included in the Microsoft Office suite is Microsoft OneNote. It is well-liked by professionals, educators, and students due to its capacity to manage increasingly complicated note-taking requirements. Users can include text, images, tables, drawings, and even handwritten notes in their OneNote notes. With its notes, sections, and pages, the app's hierarchical organisation enables more thorough content management. OneNote is available on Windows, macOS, iOS, and Android, while OneDrive allows notes to be synced between devices. Pandey (2023)

Strengths

- **Hierarchical Organization:** OneNote's structure allows users to group their notes into notebooks, sections, and pages, making it simple to handle enormous amounts of data.
- **Collaboration Tools:** With OneNote, many users can work on the same notebook in real time.
- **Freehand Drawing Support:** The program is designed for stylus input, allowing users to draw or write notes by hand, which is particularly beneficial for tablet users.
- **Integration with Microsoft Services:** OneNote works seamlessly with other Microsoft Office products and OneDrive, making it a valuable tool for Microsoft ecosystem customers. (Pandey, 2023)

Weaknesses

- **App Size and Performance:** OneNote can be resource heavy, resulting in slower performance on less powered devices.
- **Learning Curve:** Because of its broad feature set, beginning users may find OneNote more challenging to master than simpler note-taking applications.
- **Limited Export Options:** Exporting notes from OneNote can be difficult, particularly when attempting to convert notes to other formats. (Pandey, 2023)

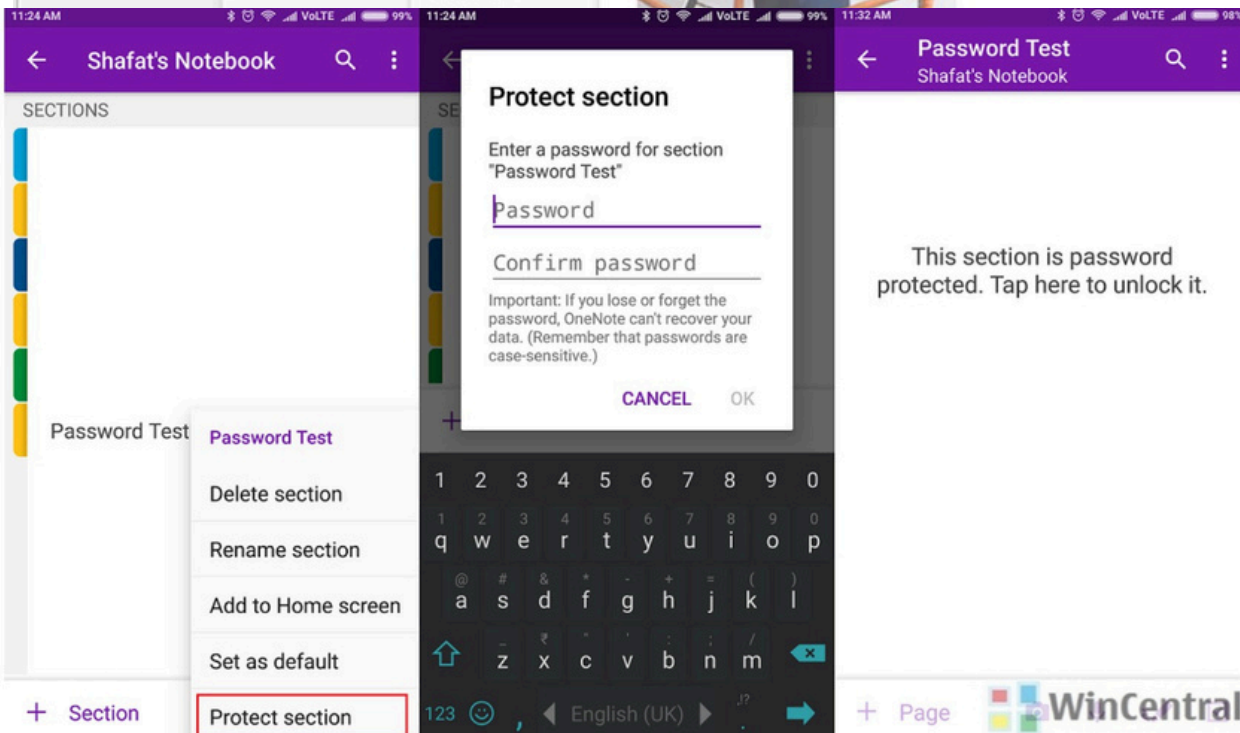
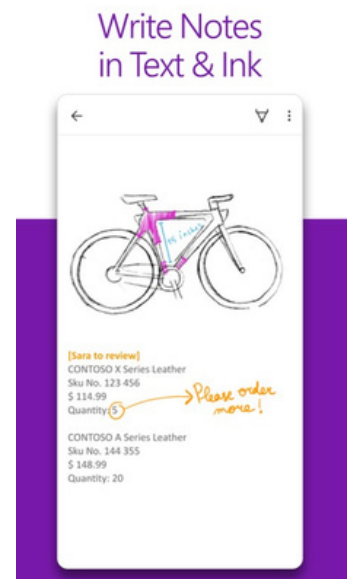
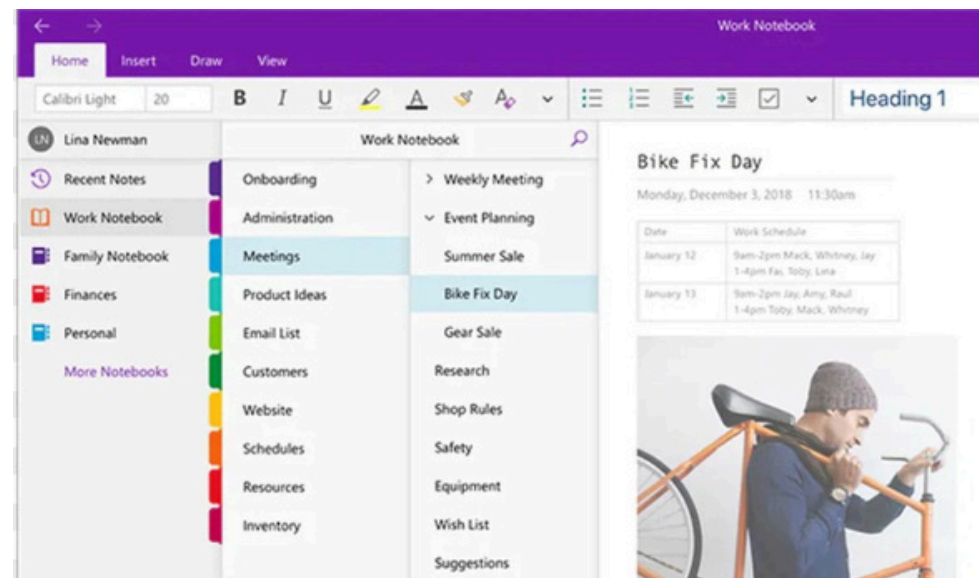
Implementation

The solution will probably be highly sophisticated due to OneNote's extensive feature set. The application's ability to manage intricate note formats and its hierarchical design suggest that it has a well-structured backend system, which may have been developed on Microsoft's Azure cloud platform. Given OneNote's cross-platform compatibility, it may have been created using a combination of shared components and native code for each platform to guarantee consistent operation.

Integration with Microsoft's inking features, which allow for quick and seamless handwriting identification, is probably the reason why the program supports stylus input and freehand sketching.

OneDrive most likely handles device synchronisation, guaranteeing that all notes are current in real time. (Pandey 2023)

Screenshots



Comparison

OneNote is a robust note-taking program included in the Microsoft Office package. It is highly respected for its capacity to manage complex note-taking requirements through the use of a hierarchical structure. Easily synchronised with OneDrive, accessible on all major platforms.

Evernote is an extremely versatile and well-liked note-taking tool that lets users store a variety of content, including text, images, web videos, and voice notes. It is ideal for both personal and business uses because to its strong organisational features and smooth synchronising across several platforms.

Anyone looking for a feature-rich and sophisticated note-taking program with strong organisational capabilities and a smooth interface with Microsoft products should consider OneNote. For those looking for a simple, effective, and smoothly integrated note-taking solution within the Google ecosystem, Google Keep is the best option.

Evernote is perfect for customers who wish to handle large amounts of diverse content across several devices in an efficient manner because of its strong organisational and search features. Nevertheless, the intricacy and expense of it may be a disadvantage for certain individuals.

Best Features off all apps and what we are using in our app

All the apps have great features, so we have decided to implement these features from the apps:

- Evernote: Multi-Device Synchronization: Evernote excels in syncing notes across multiple devices, ensuring that users have access to their information wherever they go. To create lists.
- Google Keep: we will adapt the set reminders and real time notifications. The user can create checklists and check off items from the list.
- One Note: Collaboration Tools, many users can work on the same notebook in real time. As well as password protected Notes, the user will be able to lock there note and access it with their password or facial recognition.

We will be implementing these features in our app to make our Notes app innovative, user-friendly and multi-purposeful.

Conclusion

The selection of an appropriate note-taking application is mostly contingent upon your individual requirements and the intended use of the application within your workflow. OneNote is an exceptional tool for those who need a strong, hierarchical structure to organise intricate notes, particularly if they are heavily involved in the Microsoft ecosystem. This software is highly recommended for students, professionals, and teams who want advanced functionality and the ability to collaborate effectively.

However, Google Keep stands out for its simplicity and speed, making it ideal for customers seeking a fast and effortless method to record ideas, reminders, and lists, particularly if they are also using other Google services. The device's basic appearance and seamless integration with Google's ecosystem make it perfect for personal usage or for individuals who value simplicity and user-friendliness above intricacy. Evernote

provides a highly adaptable solution, thanks to its robust organisational capabilities and extensive support for many types of media. This makes it well-suited for effectively managing a wide range of information. The extensive search features and ability to sync across several devices make it an excellent choice for customers who want a high-quality solution to manage both personal and work-related data.

Nevertheless, the high price and intricate nature of the product can discourage individuals who are looking for a more straightforward or budget-friendly alternative. In the

end, the decision between OneNote, Google Keep, and Evernote relies on your preferences, such as prioritising robust organisation, ease of use, or adaptability, and how well these programs integrate into your whole digital setup. While creating our app, we want to integrate the most effective concepts from these platforms, using their strengths as inspiration to design a solution that aligns with our unique requirements and objectives.

(2500 Words)

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