A Mobile Application for Taking Notes Based on Cornell Technique

Hasan Demirelli[1], Yalçın İşler[2], and Yılmaz Kemal Yüce[1](✉)

[1] Alanya Alaaddin Keykubat University, Alanya 07450, Antalya, Turkey
yilmazkemalyuce@gmail.com
[2] İzmir Katip Çelebi University, İzmir, Turkey

Abstract. Notetaking is considered, by many educators, as one of the critical actions of learning. There are several note-taking methods and approaches. Based on these methods and approaches, various applications, whether mobile, desktop or -Web-based, were developed. In this paper, a novel note-taking application based on a technique, known as Cornell Technique, is presented. For the software development process, Incremental Model was adopted. Requirement Analysis included, aside from examining principles and related note-taking structure of Cornell Technique, investigating (i) how to perform notetaking as an activity of learning, (ii) its product and (iii) relationship of notes for the purpose of storage. Models containing sub-activities, such as reviewing note have been identified and some were selectively adopted and related functions such as review alert (tickler) and collaboration on notetaking have been implemented. To the purpose of storage, a tree-based scheme called collection was modelled. User interfaces were first designed as mockups and click-through prototype using Adobe XD. The mobile application was implemented in Dart programming language. Google's Flutter Framework was adopted to have flexibility in UI development. The application has been published in Google Play Store for users to install for free.

Keywords: Notetaking · Cornell Technique · mobile application

1 Introduction

Note taking is an information-processing approach that is efficacious and commonly used both in daily life and in many professions [1]. In this regard, it is an action taken as a routine of productive thought processes such as learning, decision making and problem solving as well as practicing.

Due to its relationship with learning, note taking can be accepted as an academic skill, too. During any period of their education, whether it be primary school or university, students are presented either no or very little information regarding the approaches or techniques of note taking. However, notetaking is one of the most common activities performed by students. Research has shown that taking notes is a type of writing task that undergraduates perform during lectures. Brobst reported that 98% of college students take lecture notes [2].

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1.1 Impact of Note-Taking on Learning

From a cognitive point view, notetaking does not simply refer to writing down what one listens to or reads as shortened text. Learning is comprised of a few integral cognitive processes such as attention, encoding, storage and retrieval. According to Di Vesta and Gray [3], notetaking serves primarily for two cognitive functions, encoding and storage, since during notetaking students encode information by transcribing, selecting, and summarizing relevant information and organize it for later retrieval. In their study Craik and Tulving [4] presented that notetaking demonstrates significant impact on retention and recall by activating some cognitive processes. In his research Kiewra shows that notetaking significantly raises attention during lesson compared to simply listening to the lesson without notetaking [5, 6]. In another study, students asserted the same result regarding notetaking by referring to the fact that taking notes helps them remain attentive [7]. A study by Carrier et.al. Found out that one's perception of confidence in notetaking skill is a predictor of course achievement [8]. Affirmatively, a study reported that students who take more notes during lectures are high achievers in their courses [9]. In accordance with this finding, two different studies concluded that notetaking is positively correlated with test and course performance [10, 11]. The product of notetaking, i.e., the set of notes taken, is essential and critical for review; since evidence shows that students who review notes outperform students who do not review notes [12, 13]. Kılıçkaya and Çokal-Karadaş studied the effect of notetaking in listening comprehension performances of students from Foreign Language Education in Middle East Technical University. They concluded that the experimental group, which was allowed to take notes, performed statistically better than the control group, which was not allowed to take notes [14].

1.2 Problems Related to Notetaking

Many studies focused on problems that would occur related to notetaking and whether these problems cause negative consequences in learning and education []. Some of these confirmed that university students apply weak strategies and techniques during lectures and while studying, such as organizing ideas linearly and poor or incomplete notetaking [15, 16]. Another study similarly concluded that students have poor notetaking skills (e.g., organizing ideas linearly) during lecture or reading. Consequently, lecture note takers omit around 70% of critical lecture points [17, 18]. Incomplete notetaking is considered as a major issue since studies show that number of points recorded in notes is positively correlated with academic success [11, 20–23].

In relation to students' poor notetaking skills supported by evidence, a research set reveals that students' own study notes are less complete and less effective than ones provided by the instructor [17–19, 23, 24].

1.3 Notetaking Techniques and Methods

In literature, there exists a body of research regarding notetaking techniques and strategies. Basically, they are classified as (i) Linear Notetaking Techniques and (ii) Non-linear

Notetaking Techniques. In literature, linear notetaking is defined as organization of information as lists or outlines [13]. Research depicts that linear organization of notes restricts learning, in particular; relational learning [13].

Any notetaking approach should have validated strategies to activate cognitive processes mentioned. The main objective of these techniques is to guide students through a standardized and effective method or a step-by-step procedure of processing lecture or similar context material. They dictate and make students walk through certain instructions and employ certain principles. Some even propose their own structures, and formats. These methods include but not limited to Buzan Method, Verbatim Split Method, SOAR Method, Bartush Active Method, and Cornell Method [25–30]. Among them, Cornell Method has a long history [29].

1.4 Mobile Applications for Notetaking

Digital notetaking has recently become an alternative format of notetaking. There are many mobile applications for notetaking available in application marketplaces. A search in application marketplaces reveal many options offering features and functionalities. Using latest versions of some applications users can insert multimedia into their notes (pictures, voice recordings, video recordings), take voice-recorded speech-to-text notes or take handwritten notes using a stylus pen. Two popular ones are Samsung Notes [31] and Google Keep [32], both of which are downloaded more than one billion times in Google Play Store. There are others such as Microsoft OneNote [33] (more than 500 million downloads), ColorNote NotePad Notes [34] (more than 100 million downloads) and Evernote [35] (more than 100 million downloads).

In literature, research evidence concerning the use of mobile applications for educational purposes is scarce [36–38]. In their study, [36] Pyörälä, et.al. Investigated students' perceptions of notetaking with iPads in 2019. The study was conducted at University of Helsinki, which has given iPads to its freshman students in medical and dental schools since 2013. The study concluded that both medical and dental school students considered digital notetaking as the most important use of mobile devices during their first two years. In addition, the authors discovered that students had developed refined digital notetaking strategies and always had their notes ready for retrieval [36]. Shen and Reily developed a mobile application called GroupNotes that allows students to form groups and take digital notes during a lecture collaboratively [37]. In a similar effort, a mobile application called EduNotes for collaborative notetaking during lectures was introduced by Popescu et. al [38]. The authors investigated 25 students' perceptions of using the application in a lecture session through a survey regarding their experience with EduNotes. Students were positive about and welcomed the idea of taking notes and sharing them with peers. They also reported notetaking by EduNotes as relatively quick.

1.5 Aim of the Study

In this paper, we report on the development of a mobile application that makes a notetaking system, called Cornell Technique, possible to experience with many features to help users in their learning processes. An electronic model that is a version of the original technique with some essential and additional functions (facilities) were designed and

implemented. The next section introduces an overview of Cornell Technique, the electronic notetaking model designed to implement, the system architecture and tools that we utilized for the development. In Sect. 3, basic features through user interface of the application are presented. Finally, in the last section, possible increments (i.e., possible functionality features that are planned to be added in next versions) and possible design of a study on measuring the impact of use of our application on academic performance will be discussed.

2 Materials and Methods

2.1 The Cornell Technique

The Cornell Notetaking Technique had its name after the Cornell University. It was developed by Walter Pauk in 1949. Pauk states that his sole purpose was to present his students a simple and effective notetaking technique to reach high comprehension and retention in relation to what they listen to or read regarding their studies in university. In his book titled "How to Study in College", Walter Pauk later has extended his effort's scope and presented Cornell Technique as part of a methodological study approach for college education [29].

In his book [29], Pauk proposes "retaining information" as the third stage of his four-staged studying and learning approach. He divides retaining information into three sub-stages and offers Cornell Notetaking System as a technique consisting of a collection of algorithms, principles, and a documentation template to use in two sub-stages, i.e., "Taking effective notes" and "Turning notes into knowledge".

In detail, the Cornell Notetaking System is established on.

- Classification of notetaking depending on context of learning activity performed, i.e., event (e.g., lecture, discussion, meeting, or reading session)
  - How to take notes during lecture, discussion or meeting,
  - How to take notes while reading books (e.g., textbook),
- A notetaking sheet with a specific structural format
- Algorithms having steps with five relevant routines to be performed using the notetaking sheet(-s), and
- Timing of these algorithms.
  - During event (e.g., during lecture)
  - After or before event (e.g., before next class begins or quiz)

The Five routines/actions of CT are defined as follows; Record, Reduce, Recite, Reflect, Review [29].

The notetaking documentation format is presented in Fig. 1. Basically, it is divided into 3 partitions. In his methodology, Pauk relates each partition in format with a different combination of routines, learning context and timing.

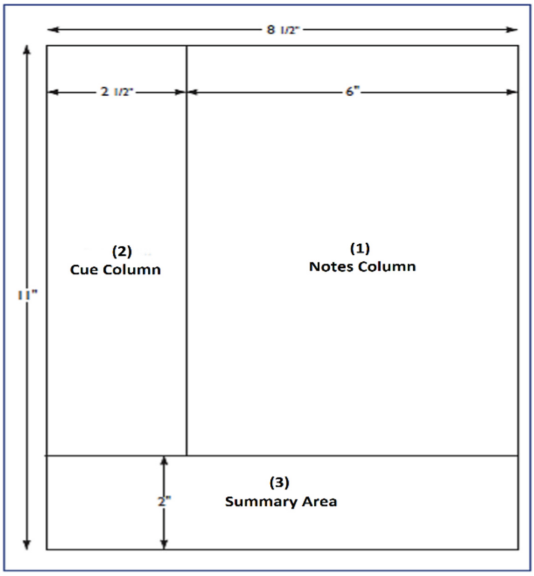

Fig. 1. Structure of a Cornell Notetaking sheet [29].

The first partition, called Notes, is as shown in white in Fig. 1. For using Notes partition, considering the categorization of notetaking mentioned above (relative to data source and learning context, i.e., listening to lecture or reading from textbook), Pauk offers two different algorithms [29] both to be carried out during related learning activity. One of these algorithms, i.e., the algorithm for note taking during lecture, discussion, or meeting, is shown in Fig. 2.

Pauk relates Notes partition to 'R'ecording action. Regardless of the type of the source or context for learning activity (lecture, book reading, discussion) Notes partition is for recording as many facts and ideas from source activity (e.g., listening to lecture, reading textbook) as possible. Pauk also proposes some methods to take meaningful notes in a quick and timely fashion for application in this partition during an event such as taking notes telegraphically [29].

The second partition is called Cue Column. This column is related to 'R'eviewing, 'R'educing and 'R'eciting routines. While taking notes in Notes partition, Cue Column should remain empty. Hence, timing for use of this column is defined correspondingly as after initial learning activity or event (e.g., lecture, class, discussion, etc.) in general. When it's time for user to review, recite and/or reduce what s/he has jotted down in Notes Column, user ought to type down questions and pivotal phrases to help clarify meanings, reveal relationships by filtering out essential points in text. Thus, Cue partition is designed for connecting key concepts and finding out relationships between them by investigating the text in Notes partition. Thereby, through a learning session consisting of three 'R's, user shall fill this partition.

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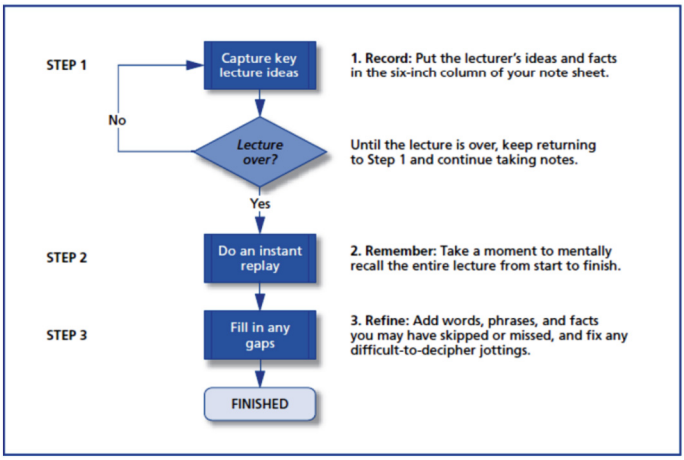

Fig. 2. Pauk's Algorithm for taking notes in Notes partition during lecture, discussion or meeting [29].

should remain empty. Hence, timing for use of this column is defined correspondingly as after initial learning activity or event (e.g., lecture, class, discussion, etc.) in general. When it's time for user to review, recite and/or reduce what s/he has jotted down in Notes Column, user ought to type down questions and pivotal phrases to help clarify meanings, reveal relationships by filtering out essential points in text. Thus, Cue partition is designed for connecting key concepts and finding out relationships between them by investigating the text in Notes partition. Thereby, through a learning session consisting of three 'R's, user shall fill this partition,

1. First, user shall make a 'r'eview through Notes Partition,
2. Then, user shall 'r'educe [reviewed] notes to essential facts and concepts, and established relationships between them,
3. Finally, user shall 'r'ecite.

The last partition, called Summary, is reserved for 'R'eview and 'R'eflect activities. Pauk refers to this partition as "the area that will be used to distill a page's worth of notes down to a sentence or two" [29]. By exploiting the Summary partition for the first time after reviewing Notes and Cue partitions, user synthesizes, reasons and draw conclusions and writes them with her/his own words. This partition is useful for quick reference, especially before exams of type quizzes.

The impact of Cornell Technique was investigated by many studies. For instance, Şahin et. al. Aimed whether applying Cornell Technique has impact on understanding and retention of the text dictated [39]. They concluded that there was a statistically significant difference between experimental group that applied Cornell Technique and control group that applied traditional linear notetaking technique.

2.2 Proposed Model for Electronic Notetaking

The proposed model consolidates and equips the original Cornell Technique together with some functionalities based on facts in reference to scientific findings.

The first functionality is collaborative notetaking. In their study regarding a Web-based collaborative notetaking application, Valtonen et.al. Reported that students showed acceptance towards the idea of sharing their lecture notes and were interested in reading other students' notes [40]. Considering these findings, the proposed model in our study, enables users to form teams and work collaboratively for taking notes. This functionality offers users much more than sharing notes and/or completing missing parts of shared/team notes. It simply makes it possible for users with different learning styles to come together and combine and reflect their learning strengths on notes. In their book dated 1971, Kolb, Rubin and McIntyre proposed a categorization of learning style [41–43]. They conceptualized and described four different learning styles, i.e., Converger, Diverger, Assimilator and Accommodator [41] and they also designed and validated a self-examining inventory for individuals to discover their learning mode, called Learning Style Inventory. Later in 2013, Kolb and Kolb refined and extended the categorization and introduced Learning Style Topology with nine learning styles [42]. Users with different learning styles will have the opportunity to collaborate on notes.

To the purpose of storing and accessing notes, the "Folder-File" model, which is a typical abstraction currently in use in modern operating systems, is adopted. In our abstraction, notes are represented and stored as files with a specific format (technically speaking, as entries in database). For storing logically related notes, a logical storage structure called "Collection", which is equivalent to a "Folder", is designed. For each user's storage space, a root collection is created by default. Users can create and store notes as separate files under their root collection. Similarly, they can create a hierarchy of collections under root collection (i.e., users can create new collection under an existing collection) to store their interrelated notes.

A reminder module was integrated as part of application of Cornell Technique's learning routines (i.e., Recording, Reciting, Reducing, Reviewing and Reflecting). The module simply allows user to set a notification-based tickler for any note. For each tickler, user sets date and time. A reminder is thought to be useful since studies show that notes are valuable when they are reviewed. It is experimentally discovered that reviewing notes is more important than recording them for learning [44]. Hence, ticklers will help users act proactively for reviewing, reducing, and reciting.

Another function in our electronic model is called Note History. This function allows users to do versioning on their notes. In other words, whenever a user makes some changes in (i.e., manipulates) and saves an existing note, that note's previous version is also saved and stored as an old version of it. The expected efficacy and benefit of note history for users is to be able to rephrase and observe their progress on the matter of respective note. However, there is a limit to versioning a note. Each version of a note is stored for 30 days. Any 30-day old version of a note is deleted implicitly by the application.

2.3 Development Approach and Tools

As the software development process model, Incremental Model [45, 46] was adopted. Major reasons behind choosing the Incremental Model are twofold; to develop a version with core functionality and have a quick release, and since we know the requirements up-front and already had the note template defined as an interface.

We analyzed and prioritized the requirements and decided on core/essential functionality set. Next, we used Adobe xD v42 (released July 2021) software to design user interface based on core functionality set [47]. To this purpose, we modeled the functions and prepared a medium fidelity click-through prototype to test product flows of the application [48, 49].

For implementation, two integrated development environments (IDEs) Android Studio v2020.3.1 and IntelliJ Idea v2021.2.3 were used [50, 51]. In these IDEs, system is implemented using Dart programming language with Flutter Framework from Google and respective plug-in for Dart programming language for the IDEs. As the database management system infrastructure, one of Google's cloud services called Firestore is employed. Firestore is a NoSQL type of database management system [52].

2.4 System Architecture

The system architecture is presented in Fig. 3. It is a two-tier application mimicking a three-tier architecture [53]. Basic system operation at the data tier and parts of business/application tier are realized using dedicated Google Services. For operations at data tier, such as database operations and file hosting, Google's Firebase Service is adopted, which is an instance of Google Cloud Services with advanced capabilities [54, 55].

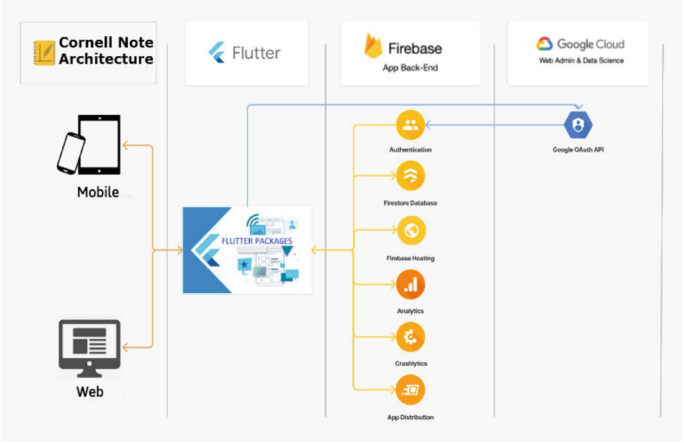

Fig. 3. System architecture with both Web and mobile applications of Cornell Note.

2.5 Data Model

Google's Firebase Service relies on Google's Firestore Cloud Database Service. Firestore is a NoSQL type of database management system and requires JSON notation-based data modeling. Therefore, for our system's data tier operations, data model is designed using JSON [56]. The data model is shown in Fig. 4.

In our data model, at the root are two types of arrays (collections) of objects, i.e., User and Group (Team), defining a user or a team. A user is defined by several fields, including but not limited to user-id, display Name (a field cloned from Google OAuth API) and email address followed by an array of objects of type Document representing notes and note collections of user. Each Document has type field to indicate whether object is a note or note collection. In addition, parentId field is available as the track of note collection the object is stored. Finally, within each note of type Document is defined another type of array (collection) of objects called History, in which old versions of a note is stored with fields homogeneous to ones in object of type Document. In case notes and collections of notes belong not to a single user but to a team, an object of type Group with fields such as id, user (representing number of users in team), created_at is defined.

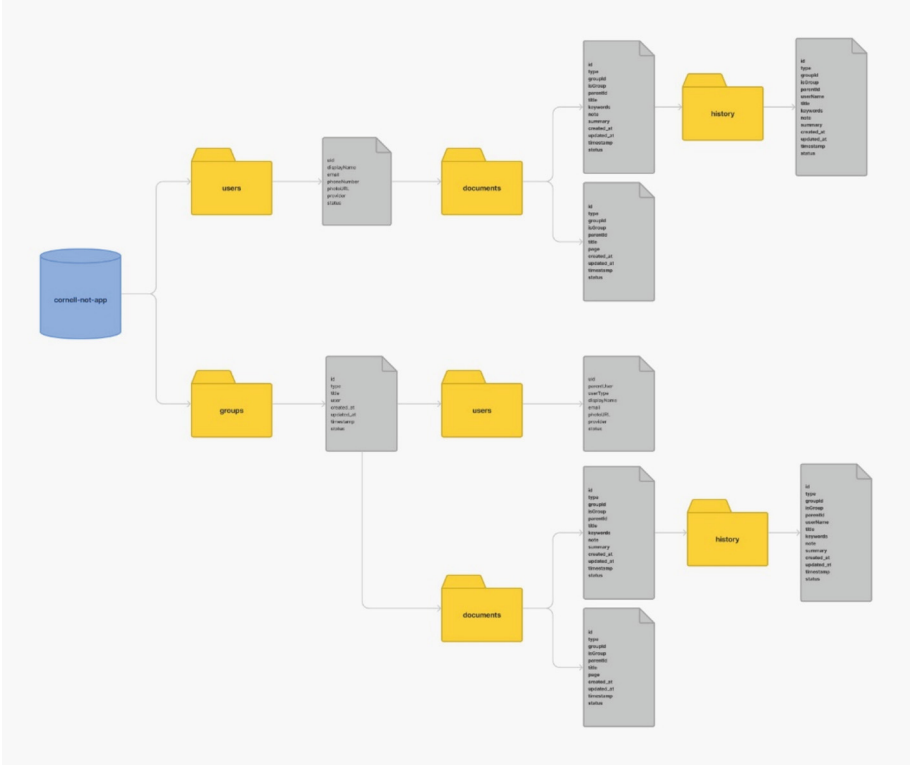

Fig. 4. Data model implemented in Firestore Cloud Database Service with 7 collections.

In definition of a group are two arrays (collections) of objects of two types, User and Document. The array called User is designated to store members of a team (Group). An object of type Group can be created by any user, who is called Creator. Creator of a team can add members by their email addresses. While adding a member, creator must also assign a role to that team member. There are three roles represented by the field userType, Moderator, Editor and Viewer. Each role represents an authorization schema (set of permissions) per operations within group. Each Document type of object in first array is either a note or a note collection. Within each group note, an array of old versions of note is defined as History, which is an array of old versions of a note to be stored with fields homogeneous to ones in object of type Document.

2.6 Basic Operation and User Interface

To manifest basic operation and functionality of our application, we designed a use case diagram and used it through the rest of the development. The use case diagram is presented in Fig. 5. It also allows users to image and get an idea of what they can do with the application. As seen in Fig. 5, there are.

- 32 distinct use cases,
- between them are 17 different relationships of types $<\ <$ include $>\ >$ and $<\ <$ extend $>\ >$,
- 17 distinct associations from user to use cases.
- 4 distinct $<\ <$ invariants $>\ >$ (column-wise).

The user can start using Cornell Note after logging on. Log on operation requires user to have an active Google account. Hence, the first screen any user would face is shown in Fig. 6 (a). First time logging on is considered as a registration and as part of the registration process, for each user, a root note collection is created. After logging on, user will be viewing her/his root collection screen showing all notes, note collections and teams (groups) user is a member of. By tapping on any note collection in her/his root collection, user can view notes and sub-collections of notes within. Included in this screen on the right bottom corner is a floating action button with three sub-actions to choose from, called create new note, create new note collection, and create new group. In addition, a search button with magnifier icon is available on the top right corner of this screen. By tapping this button, user can perform a search for those notes and note collections having names matching the text s/he would input into the search box that appears. A sample of this user interface is presented in Fig. 6 (b). When viewing this UI, user can view the contents of a note in Cornell Note template simply by tapping that note. The sample of UI showing contents of a note is available in Fig. 6 (c). Within the Cornell Note Template UI, three partitions are created with default dimensions. However, users can adjust the dimensions of partitions by tapping on and dragging the bars between partitions. This functionality allows users to adapt the partitions' area (size?) to their content when and where necessary. On top right corner of this screen are three buttons represented with icons for search, tickler and action overflow menu (also known as "more menu"), respectively. The search function enables user to search for a text in note. User can add a tickler for the note s/he currently is viewing through a two-stepped interface,

the first one for date and the second one for time. A snapshot of UI for viewing a note in Cornell Technique's template is in Fig. 6 (c).

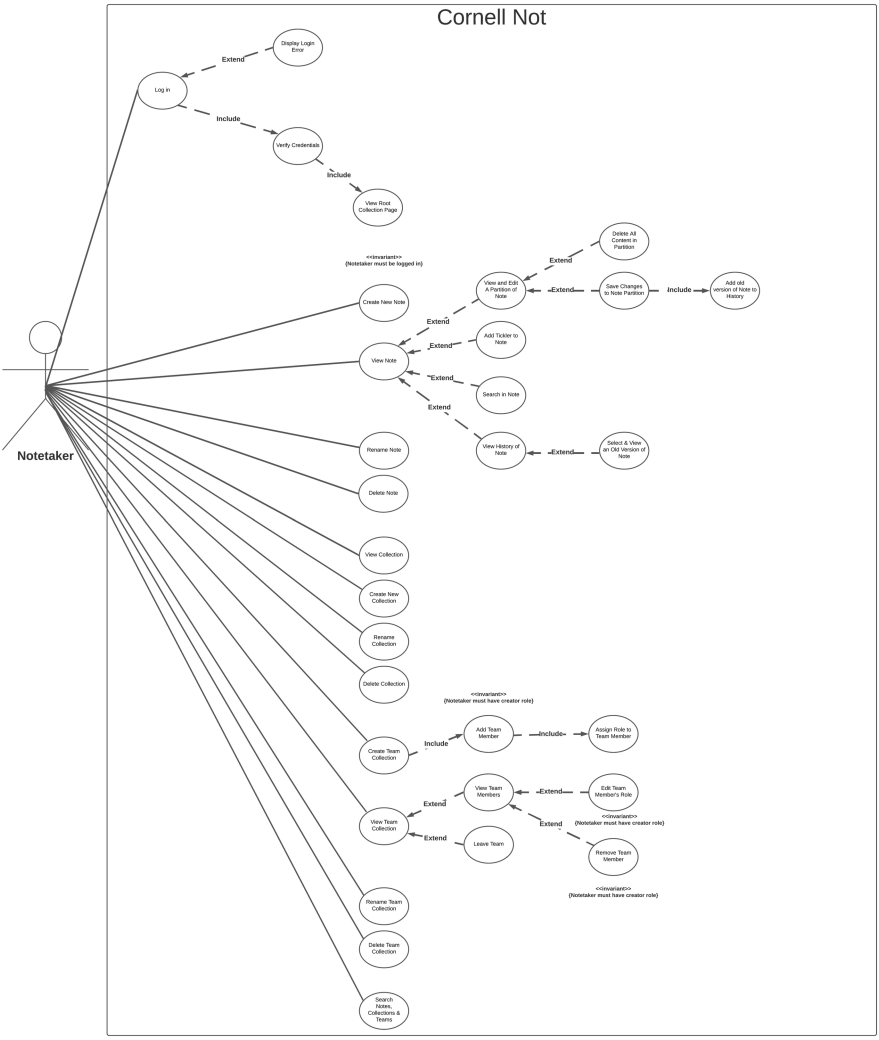

Fig. 5. Use-case diagram for Cornell Note.

Whenever user double-taps on one of the partitions of note that is currently viewed on the Cornell Note Template UI, that partition would be viewed in Editor UI. Double-tap for viewing and editing partition of a note is a design choice related to Midas Touch Phenomenon in interface design [57, 58]. In the Editor UI, at the top is the note's name concatenated with respective partition's name as the title. Below the title is the editing area showing the content of the respective partition.

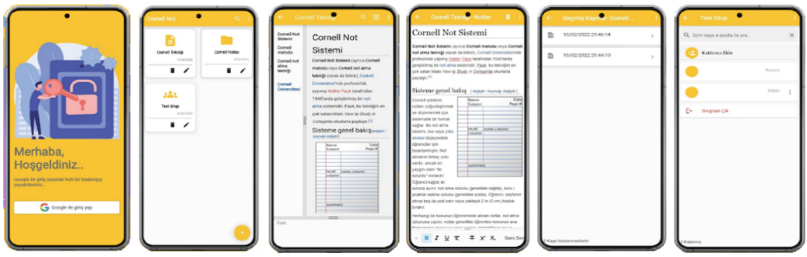

Fig. 6. User interface screenshots for login, root collection, template and editing.

At the bottom is a sliding bar with various functional buttons for formatting and adding multimedia (e.g., pictures, audio, etc.) into content of partition that is currently viewed. In case user makes changes in content of partition of a note, regardless of availability of Internet connection, changes are saved (if user confirms). In clear terms, the application saves changes in a note or a newly created note locally (i.e., in mobile device) if it cannot connect to Firebase service. Whenever the connection is established, the changes are committed in Firebase implicitly without further interaction with user and saving changes transaction is completed.

While viewing/editing a note on Cornell Note Template UI, users can also check old versions of that note. To this purpose, user should tap on overflow action menu at the top right corner and tap History action. If there exists one or more old versions of note, they are listed in Note History screen. In this screen, each old version gets listed with the date it would become an old version. The capacity of the system to cache old versions of notes is defined as the last 30-days, i.e., all versions of all notes within the last 30-days are stored. A sample of Note History screen is at Fig. 6 (e).

Users can also form teams to take notes collaboratively. The application provides this functionality through the floating action button at bottom right of the root collection screen as shown in Fig. 6 (b). After tapping the floating action button, by simply tapping create new group option, user shall view Group Creation Screen shown in Fig. 6 (f). On this screen, user can add members to her/his new group by typing each user's e-mail address after tapping "Add New Group Member" button. All functionalities for notes (e.g., tickler, history) are available for group notes, too.

3 Discussion and Future Work

The application is currently available in Google Play Store since March 2022. The latest version of our app reached 1000 + downloads as of 11.03.2023, globally. Number of monthly active users (MAU) for the last two months changed between 180 (minimum) and 256 (maximum) with an average engagement time of 28 min 00 s. Figure 7 is a graph showing activities of monthly active users (256) with respect to language on user device for the last four weeks. The graph shows MAU for the first seven languages.

Considering the nature of notetaking and characteristics of Cornell Note Technique, some functions will be added to allow users better experience note taking and to increase effectiveness and efficiency of notetaking.

	Language	↓ Users	New users	Engaged sessions	Engagement rate	Engaged sessions per user	Average engagement time	Event count All events
		256 100% of total	178 100% of total	616 100% of total	77.19% Avg 0%	2.41 Avg 0%	28m 00s Avg 0%	5,382 100% of total
1	English	92	67	173	73.31%	1.88	14m 30s	1,488
2	Spanish	91	71	229	77.89%	2.52	46m 50s	2,235
3	Turkish	18	5	31	57.41%	1.72	10m 39s	245
4	Portuguese	13	7	61	91.04%	4.69	1h 00m	420
5	French	6	4	12	85.71%	2.00	7m 39s	76
6	Italian	6	5	16	84.21%	2.67	12m 28s	92
7	Chinese	5	2	9	60%	1.80	4m 08s	53
8	Russian	5	5	16	84.21%	3.20	21m 46s	101

Fig. 7. Google Analytics statistics for our app on 11.03.2023 for the last 4 weeks.

It is planned to add Kolb Learning Style Inventory as a self-examining tool to Cornell Note mobile application. Behind this decision lies the motivation to increase individuals' understanding of the process of learning from experience and enable users to realize their unique individual approach to learning as Kolb and Kolb phrases in their book [42]. Thus, users will be empowered to taste and become aware of their own unique style with reference to generalized structure of process of learning. They can also realize how it is to study with people with different learning styles and experience how it results and yields for themselves in notetaking.

In the next version, while setting ticklers, our application will enable users to select relevant Cornell Technique routines (i.e., five 'R's) together with related partition[-s]. Such a functionality will allow users to easily remember relevant partition[-s] together with his/her next learning routine[-s]. From a user's point of view, associating partition[-s] of a specific note with learning routine[-s] user would plan to execute might offer a more precise learning activity management. Setting repeated or periodic ticklers will be available in the next version, too.

For the next version, another functionality we plan to add is linking notes. Basically, this is an identical function to linking documents in World Wide Web. To our knowledge, there are not any notetaking applications offering such a feature/function. The objectives of this feature are twofold:

- Connecting the notes based on conceptual relationship between them (e.g., prerequisite or order of subjects in notes)
- Connecting concepts within different notes that are related to each other for review and reduce routines.

In addition to user-set ticklers, there will be new type of tickler. This type of tickler is called Reduce in Cue. It is an implicit tickler that will remind user of those notes in which only Notes partition is used. Reduce in Cue is a characteristic reminder of Cornell Technique to help user take next necessary action, i.e., Reduce, to continue learning process on a specific note. User can choose to pass, to reduce and fill Cue and to delete related note.

Currently in our app, reminder module operates with local machine notifications and there is no functionality that allows users to list set ticklers. In addition, the functionality

of Ticklers by Reminder Module will be migrated from local machine to Firebase. For this purpose, the data model shall be redesigned, and Firebase Cloud Messaging API will be used.

In the current version, system can store old versions of each note dating 30-days back, as a maximum. In the next version, users will be able to set their preferred cache length within an interval of months with a maximum of 12 months.

There are three similar mobile applications available in application marketplaces such as Google Play Store and AppStore of Apple. However, those applications are inferior to our application with respect to features and functions available and UI design. A comparison of these mobile applications to our application with respect to some functions and features is presented at Table 1 [59–61]. Our application (named Cornell Note) can be downloaded from [62].

Although there exists many studies investigating the impact of Cornell Technique in different learning contexts, to our knowledge, none of them were involving the use of Cornell Technique through a digital environment. We plan to investigate the impact of Cornell Technique on academic success in an engineering faculty in a university for different core courses.

Table 1. Comparison of similar mobile notetaking applications to our application

	Columns	Speech to Text CN	Cornell Notes	Our App.
Collaboration	✖	✖	✖	✔
Collection	✔	✖	✖	✔
Tickler	✖	✖	✖	✔
Formatting	✔	✖	✖	✔
Multimedia	✖	✖	✖	✔
Search Within Notes	✔	✖	✖	✔
Search Within Collections and Note Names	✖	✖	✖	✔
Template Frame Adjustment	Partial	✖	✖	✔
Note History	✖	✖	✖	✔
Web	✖	✖	✖	✔

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