



BAIT2203 HUMAN COMPUTER INTERACTION ASSIGNMENT REPORT

Programme : [RSDY2S1](#) (Intake:[202405](#))

Tutorial Group : [5](#)

Prototype name: [WeChat Application System](#)

Declaration : I/We declare that this assignment is free from all forms of plagiarism and for all intents and purposes is my/our own properly derived work.

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Introduction

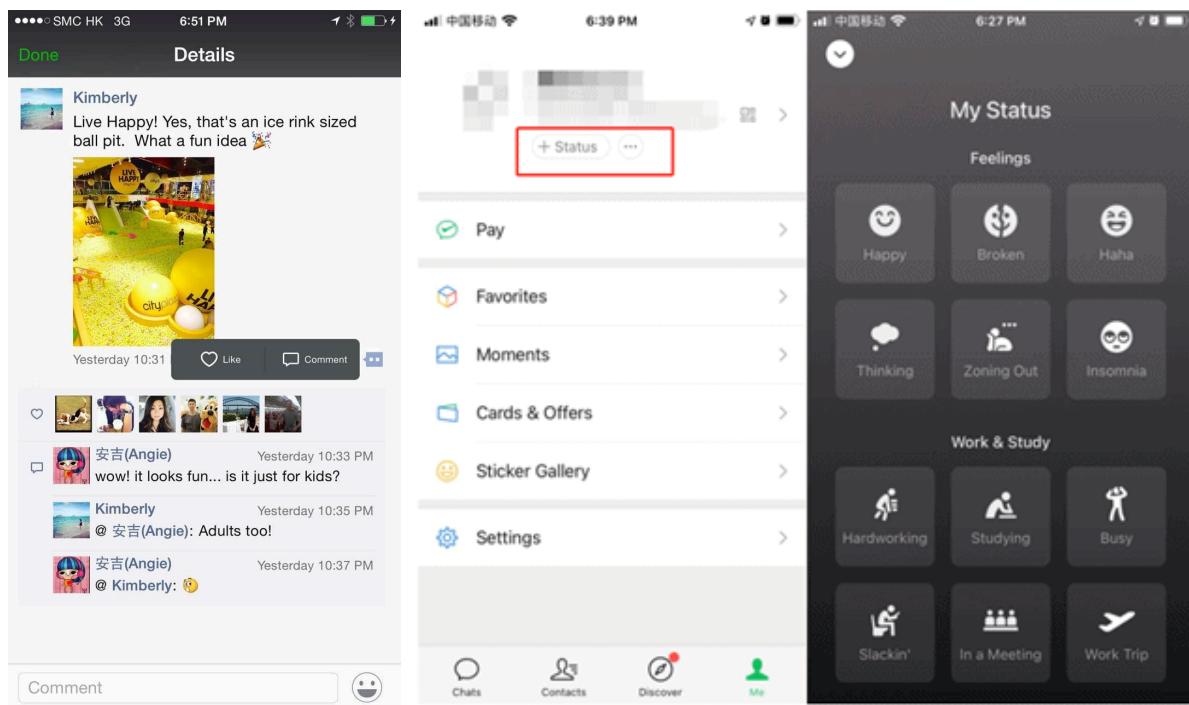


(Appendix 1: WeChat Application Icon)

WeChat is a leading social media messaging platform that serves millions of users globally by providing instant messaging, social media, and mobile payment services. Not only that, WeChat has also provided extra services for wider target audiences. For the young users, WeChat has developed a mini program feature for enabling those users to explore and play the free mini games provided. This can arouse curiosity of users and stimulate the positive emotion of users in this age range. Besides, there is an interesting feature when users are chatting with others which is the tickle function. Tickle function allows the users to “nudge or tickle” someone virtually via double tapping the profile picture in the conversation page to attract his or her attention without typing any words. Users can also change the tickle message manually in the profile page. After double tapping, there will be a message shown in the conversation page, “I tickled someone’s tickling message”. This can effectively make the users feel happy and entertained while the people he or she is chatting with will also get this funny message.

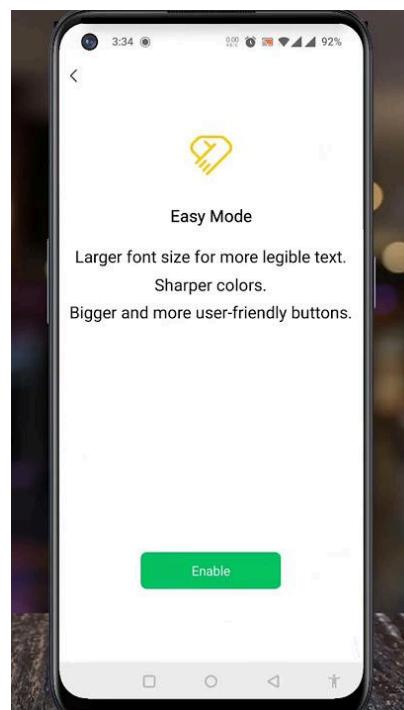
The image contains three screenshots of the WeChat interface. The left screenshot shows the main navigation bar with 'WeChat (22)' and icons for Moments, Scan QR Code, Shake, People Nearby, Message in a Bottle, Games, and Mini Program. An orange arrow points to the 'Mini Program' button. The middle screenshot shows a list of available mini programs: '今日头条今日头条lite', '滴滴公交查询', 'HZPlus HZPlus Test', '微众银行', '摩拜单车', '携程酒店机票火车票', '多伦多生活黄页', and '手机查报价'. The right screenshot shows a conversation with 'Chengdu-Expat 2'. It displays a message from the user accepting a friend request at 10:20 and a message from the friend 'I tickled Chengdu-Expat 2' at 10:20. A virtual keyboard is visible at the bottom.

(Appendix 2: WeChat Mini Program & Tickle Function)



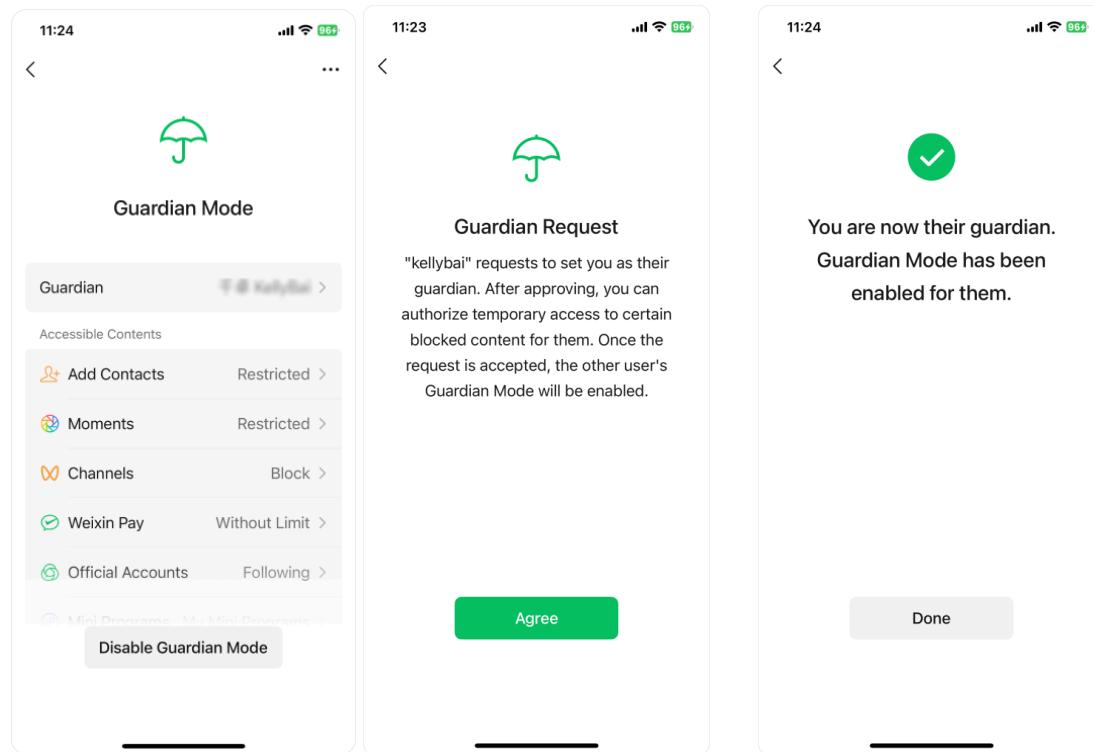
(Appendix 3: WeChat Moments & Status)

In order to build a social circle for the various users, WeChat has also enabled a feature called “**Moments**”. This feature allows users to share their fun and memorable moments with their friends. Meanwhile, other users can view, comment and even react to their posts. Apart from that, WeChat has also allowed users to add and update their status by adding their status emoji and what they want to say. So, other users will know their current status and react and comment. WeChat has also allowed users to **customise the application background** by uploading their own wallpapers, let users decide whether to use dark mode or light mode and resize the text.



(Appendix 4: WeChat Easy Mode)

From the aspect of convenience, WeChat has developed an easy mode especially for the elder user group. The **easy mode** will automatically enlarge the font size, sharpen the colours, make all the buttons bigger and provide “Listen to Text Messages” feature at the same time. This can effectively increase the readability of messages without worrying at this stage of users not being able to read or send messages to others. On the other hand, by considering the flexibility of the application, WeChat has allowed users to **decide their preferred language** for accessing the application. The total amount of language provided has reached up to 20 languages. Thus, they can easily understand all the functions and instructions provided in the application.



(Appendix 5: WeChat Guardian Mode)

Since nowadays kids have also started using the functionalities provided by WeChat application, WeChat has created some useful features designated for them. The “**Guardian Mode**” feature can set restrictions on certain features, WeChat usage and time spent on the application. This can effectively help parents to monitor their children’s activities on the application. In order to avoid children from viewing inappropriate content, this mode can also filter that content and promise safe content for parents’ kids. If there are any wanted changes for the Guardian Mode, parents can make any adjustment on the guardian mode settings anytime.



(Appendix 6: WeChat Voice Call & Video Call)

By considering the possible requirements for specific users, WeChat has provided some functionalities to overcome their pain spot. WeChat has developed the **voice messaging function** for the users who have difficulty when typing. So, they can still communicate with others via application even though they cannot type messages. For the users who cannot see or hear, WeChat has developed functions called “Text-to-Speech” and “Speech-to-Text”. This function can convert text to speech and vice versa.

Despite its wide array of features, several user experience and functionality issues persist, impacting user satisfaction and engagement. This report proposes a comprehensive enhancement to WeChat's current system, aimed at addressing these deficiencies and enhancing the overall user experience. The proposed system aims to resolve the following issues:

Firstly, **the inability to reply with quick gestures is a significant problem**. Users must long press a message to reply to it, which is cumbersome and time-consuming. Additionally, **message navigation is problematic** because clicking on a referenced message does not jump to the original dialog position, making it more difficult to look for certain messages even if they are referenced. Moreover, **users cannot reply to messages using pictures or stickers**, resulting in limited interactions between users. Similarly, the **inability to reply by voice message** leads to ambiguous responses, as the recipient might not know which message the sender is trying to reply to. Furthermore, users **cannot adjust the playback speed of a voice message**, which consumes a lot of time when listening to a voice message where the sender is talking slower than the recipient can listen and comprehend.

In addition, users **cannot see others' online status or last active time**, making it harder to decide whether or not to send a message to someone. Other than that, the current system **only allows message recall within two minutes**, without the functionality of **editing a sent message**. If the message was sent longer than two minutes ago, it cannot be edited anymore. Another issue is the **lack of options for text styling**. Currently, there are no options for styling text (strikethrough, italic, bold, underline) in the chat box, resulting in limited interactions between users and inability to highlight important information within the text. Also, **important messages cannot be starred (pinned)**, making it cumbersome and time-consuming to look for important messages that need to be frequently accessed. Furthermore, **message data files can only be backed up locally**, resulting in cumbersome migration of chat history data across different devices. Additionally, there is **no noise cancellation feature for video calls**, making it hard to maintain a disturbance-free conference. Lastly, users **cannot send out voting/polling messages** for other group members to collaborate and share their opinions by voting for an option.

By addressing these issues, the proposed system aims to **significantly enhance the usability and functionality of WeChat**, ensuring a smoother user experience. The proposed system upgrade will be implemented within the WeChat application, accessible on both mobile and desktop platforms. It targets users across all regions where WeChat is currently operational, with a particular focus on areas with higher user density.

The target audience for this functionality enhancement includes all existing WeChat users, encompassing diverse demographics such as personal users, businesses, and organisations. The enhancements will cater to the needs of frequent communicators, professional users who rely on WeChat for business communications, and social media enthusiasts who utilise the platform for staying connected with their friends and family. The implementation of the proposed system is planned to be released after finishing a prototype of the system with the addressed problems solved. A phased approach will be adopted to ensure seamless integration and minimal disruption to users.

The necessity for this upgrade stems from numerous user-reported issues that hinder the usability and functionality of WeChat. Addressing these problems is crucial for maintaining WeChat's competitive edge in the social media and instant messaging platform market. The upgrade aims to resolve these issues, thereby improving user satisfaction and fostering increased engagement on the platform. The proposed system enhancements will be achieved through a combination of user interface improvements, backend upgrades, and integration of new features. Key areas of focus will be discussed further below in Usability Goals.

PACT Analysis

People

Based on the statistics, there is a gradual increase of WeChat worldwide users from Q3 2022 to Q1 2024. The highest record has reached up to 1,359 million of worldwide users in Q1 2024. (Statista, 2018) Meanwhile, most of the WeChat users may have different characteristics based on their sociology, culture, biology and preferences. Thus, we will determine the most current users of WeChat by filtering different mental and physical distinctions from the users.

Firstly, we will determine the current users of WeChat based on the age group. The requirements and behaviour of users with different age groups may differ along with their physiology and psychological changes. From the aspect of **users who are below 18 years old**, most of the users within this age range are children and teenagers, they are in the stage of developing new abilities and skills while being curious about things and sensitive to stimulation such as visual, auditory and tactile. Thus, they will be more likely to find and explore interactive topics and matters such as playing games. This can arouse curiosity of users and stimulate the positive emotion of users in this age range.

For the users who are within the **age range of 18 to 24 years old**, they may desire to expand their social cycle while applying customization features on their favourite components. In order to achieve that, they will use various online social platforms to share their fun and memorable moments with their friends. Meanwhile, they also desire to get some positive reaction from their friends by viewing their comments and reactions. Moreover, most of the users at this age range will like to follow the latest trend and interesting design in their daily life. For example, they often buy clothes with the latest fashion design or make customization on their phone's wallpaper and theme.

For the users who are within the **age range of 25 to 50 years old**, they will focus more on high efficiency design and features in most of the things. Most of those users have entered social work and they always have to keep track of the workspace pace from time to time. They always put their smartphone in their pockets so that they can receive the notifications at any time and anywhere. Meanwhile, they are also likely to use the messaging application for chatting with their colleagues, friends and family via online because they have to work at other places most of the time and there is less chance for them to physically meet with someone they care about. On the other hand, the users at this age range usually choose to use smartphones to make payment for convenience purposes when buying something. This is because transactions via smartphone payment applications can effectively reduce the time usage for transactions and the users do not have to bring too much money outside.

For users who are **51 years old or above**, they tend to perceive simple and understandable information based on what they have learnt in past years since their eyesight and learning ability have gradually deteriorated. Sometimes, they will want to use a messaging application on their smartphone. Thus, they will expect simple and unambiguous content displayed by the application so that they are able to easily communicate with someone they want. Besides, they will also prefer to receive messages and information using their ears compared to using their eyes since their eyesight ability is degraded. Although most users at this stage have low mobility and weak bodies, they will gradually focus more on their health compared to younger ages. They will start paying attention to their body and doing

simple exercises regularly. Sometimes, they will even read more news reports about human health and desire to do body checking to maintain their body health anytime.

Apart from that, **language** is also one of the noteworthy characteristics which can be differentiated among different people. In Malaysia, most of the people will tend to use Malay, Mandarin and English as their preferred language in their life based on different situations. For Chinese, they will tend to use Mandarin in daily life, especially when chatting with Chinese people. For Malays, they will get used to applying Malay language in their daily life. For Indians, they will prefer to speak Indian language in conversation. If they are faced with languages which are not familiar to them, they have to spend a lot of time doing translation so that they can understand the meaning of the information they saw.

There is a portion of users who have the special requirements due to **congenital disabilities**. Everyday, they have to overcome their pain in most scenarios. For the blind person, they will prefer to perceive the information via their ears or tactile sense since they cannot see anything. For deaf people, they will tend to perceive data using their eyes.

Activities

Nowadays, most of the parents will allow their children to learn using communication applications on electronic devices. We will break the routine use cases of kids into several possible timeframes. Most of the time, the kids will wake up at 6.30 am to take their breakfast and let their parents bring them to school. Usually, they will study at school until 3.00 pm. It indicates that they will not be able to use smartphones within this timeframe. After 3.00 pm, their parents will fetch them and go back home to take a shower. At home, parents will just give their kids the smartphone to use. To ensure a safe and more controlled environment for their kids, parents may apply some restrictions on the smartphone before giving it to kids. Thus, they can always avoid children from viewing inappropriate content. Meanwhile, the kids will accomplish their school tasks and projects at home. In order to **discuss school tasks with their classmates**, they may use online messaging applications to communicate with each other via text message or video call even though they are not physically staying at school. After completing the school work, it is usually around 5.30 pm. The kids might feel bored and want to play some games to relax themselves. When it is 7.00 pm, they will have dinner and **chit chat with their friends** via online. At around 9.00 pm, they will prepare themselves for going to bed.

From the point of view of secondary school students who are around 13 to 17 years old, they usually wake up around 6.00 am. They will **check the messages and notifications from their friends, family members and school groups** using their laptops or smartphones after taking a bath. They would also **check the school announcements and updates posted by school teachers** so that they would not miss any important information before arriving at school. During school time which is between 8.00 am and 3.00pm, they might use the computers provided in school labs to access group discussion applications to **discuss assignments, ask questions on the school group chat and share class notes** with each other. Sometimes, teachers will also guide students to **access the mini programs** or education application preinstalled on the lab computers for education purposes. (于小明, n.d.) Thus, students can learn more and detailed information about their school syllabus. After school, it is around 3.00pm. Some of the students have joined co-curricular activities and clubs organised at school. So, they will stay at school and **conduct communication with**

the club members and receive the announcement posted by the person-in-charge of the activities. When it is 6.00pm, they will complete their homework or be ready to pre-study tomorrow's class content with their classmates. So, they may form a study group via online for **sharing learning outcomes and discussing school-related topics.** This can effectively improve the study productivity and help them to gain more knowledge as everyone shares their learning thoughts. When it is 9.00pm before going to bed, they may want to **entertain themselves or share their interesting moments at school via an online method.** They would view the "daily stories" from their friends using their smartphone. (Coluccia, 2023) They will also share their unforgettable moments on the online social platform by posting some text, images or even videos.

From the point of view of office workers, they usually wake up around 6.00 am. They will also **check the messages and notifications** from colleagues, supervisors and other work-related groups. When having breakfast, they may want to **read the latest news posted by the official accounts on social media platforms.** Thus, they can always stay updated on industry news. When it is 8.30 am, they will start working at the company office. So, they will communicate with their colleagues and seniors using their office computers for **discussing working topics and tracking work progress.** Sometimes, they may also conduct more detailed communication with others using video conferencing. If they are remote workers, they will do it more frequently as they are at different places for business purposes and not able to meet with each other physically. When there are **emergency meetings and announcements,** they will also transmit the important messages directly using their smartphone so all of the workers can immediately acknowledge the notice. During lunch break which is around 12.00 pm, they will go to a restaurant and order food. When it comes to payment, they can just use their **smartphone application for transferring money** to the cashier or friends who are helping to checkout for the food. After lunch break, they will repeat those activities when working until they get off. At night, which is around 9.00 pm, they will **watch interesting short videos using their smartphones or tablets** to relax themselves before sleeping. (于小明, n.d.)

From the view of retirees or elders, they usually wake up at 6.00 am. Then, they will **read news articles via online or newspapers.** Sometimes, they will also desire to **obtain some health tips and wellness information via the smartphone.** So, they can monitor and maintain their exercise routines for building a healthy lifestyle. At 9.00 am, they would **communicate with their family members.** For example, they may send voice messages, conduct voice calls or video calls to ask their childs for knowledge about how they are doing. Sometimes, they might also apply the same way to ask for help from their childs as elders' executive ability is gradually dropped and they may not be able to do something they want. Since it is not convenient for elders to communicate by typing messages, they will tend to use the voice or video message and call to talk with someone. At lunch time, they may want to order food at a restaurant or via food delivery as mobility issues. When they want to make payment, they will use a smartphone to make the transaction so they do not need to bring too much money in their wallet and no need to count the money. In the afternoon or at night, they may conduct video calls with their children again. Additionally, they may also **watch some videos through television or tablets** to kill time or entertain themselves.

Contexts

In the contemporary technological age, people of all ages are utilising electronic devices to simplify and enhance their daily activities, ensuring seamless communication over long distances without the need for physical interaction. These users are often found in a variety of environments, including the home, the workplace, public places, and while out and about.

Some users are found in **cooler environments**. For example, in professional environments such as corporate boardrooms and offices, users typically work in fully equipped and air-conditioned environments. Designed to maximise comfort and productivity, these spaces are equipped with basic tools such as monitors and webcams for virtual meetings, and are often accompanied by a glass of water to stay hydrated during discussions with clients or colleagues. In addition, many users frequent cool, air-conditioned shopping centres. These multi-story complexes are interconnected by escalators and elevators and have aesthetically pleasing floors with a variety of tiles. The wide array of stores in these shopping centres offer a variety of experiences, from dining in restaurants and shopping for clothing to browsing luxury boutiques and watching movies in theatres, creating a comfortable and attractive environment for all visitors.

In addition, users usually enjoy the **right temperature environment** in the comfort of their homes. In the living room, they can lie down on a cosy couch or pillow-top bed and relax with the breeze from the fan. Often, they will lie down, perhaps cuddling with a favourite stuffed animal, while responding to messages or chatting with friends. Sometimes after winning a game, users want to share their daily experiences or celebrate an accomplishment, often sitting in ergonomic gaming chairs designed for extended use. These chairs are placed in front of a table with a computer, which may also have snacks, drinks and various gaming accessories. Essential tools such as headsets, keyboards, and expansion panels with multiple chargers allow users to have a more immersive gaming experience, ensuring that their devices are always charged and ready to go. Additionally, users often use their devices while dining. They may sit at a kitchen table that may have stale grease stains, cross their legs, and eat lunch or dinner while replying to messages or browsing through entertaining videos.

Users often interact with apps in **noisy public transportation environments**, such as standing or sitting in transportation such as light rail, subway or air-conditioned buses during rush hour. These modes of transportation are equipped with seats, rails or handrails for standing passengers to ensure stability during the journey. Additionally, users typically wait to return home from work in **hot environments**, such as curbside bus stops. These stops typically have a bench for passengers to sit and wait for the bus, and some have old canopies or no canopies at all, leaving passengers directly exposed to the elements. In the evening, passengers may wait in the playground or garden, where it is still slightly warm. These places usually had benches and tables where passengers and their families could sit and enjoy the greenery and flowers, perhaps with a tea set on the table.

With today's technological advances, users who use electronic devices to communicate can be found in a variety of environments, from sitting on a bathroom seat, to outdoors in the grass and greenery, or watching their children play on the playground.

Technology

The software technology of a system is an essential part, adapting any hardware but not adapting different software will also lead to a failure. However, **support for almost all the operating systems** on the market, from Windows and Linux, which are commonly used in desktop computers, to IOS and Android, which are commonly used in smartphones will be managed.

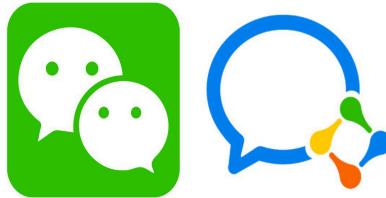


(Appendix 7: Example for Operating System Logo)

- Advantages
 - a. By supporting mostly operating systems in the market, these can be accessible to a wider audience, regardless of the device they use and this can provide a broad user base.
 - b. This has provided a user convenience for all the users, the users can choose their preferred device such as any smartphone, mobile phone, laptop and any other devices that use the operating system without being constrained by app compatibility.
- Disadvantages
 - a. The development will be more complex as the resources are intensive. This is because it needs to develop to support multiple operating systems with each their specialised requirements and this requires significant resources in terms of development, testing and maintenance.
 - b. When developing the system, the vulnerability management and customer data privacy are needed to be ensured. Ensuring security across different platforms can be even more challenging because security vulnerabilities and patch cycles can vary from operating system to operating system, and managing user data privacy across different platforms with varying regulations and standards can be complex.

In addition to the basic web version, more **convenient apps** are also needed so that users can have a better experience. Apps are more convenient for users to carry out various activities on a daily basis, such as communication, entertainment, shopping, navigation, and so on. Apps can also provide specialised functions to users, such as payment functions that can only be used in mobile programs, to make users' daily life more convenient and easy.

WECHAT WECOM



(Appendix 8: WeChat and WeCom Apps Logo)

- Advantages

- a. Apps can help enhance the user experience because they are designed with specific user needs in mind, improving usability and functionality for specialised features required for everyday use or business use.
- b. Apps can make user security and privacy safer by implementing stronger security protocols to protect user data, providing a more secure environment than the web interface, which may be more vulnerable to attack. And applications can integrate advanced authentication methods, such as fingerprint recognition and facial recognition, which are more secure and difficult to forge than traditional passwords.

- Disadvantages

- a. The development and maintenance cost will be high because it is resource intensive and the apps need continuous updates for fixing bugs or implementing new functions to keep the app functional and secure, adding to the maintenance workload.
- b. Storage and resource usage of user's devices may be consumption such as the space as the apps take up storage space on devices, which can be a concern for users with limited storage capacity. For example, the chat history storage may take up a large space after users use WeChat for longer and longer periods of time.

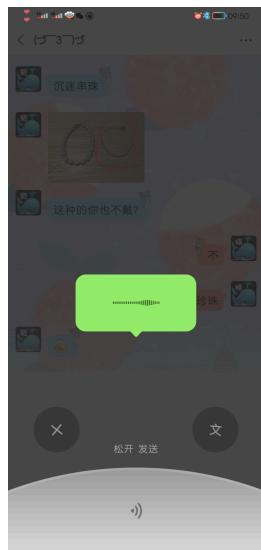
Implementing simple and interesting interfaces that are easy use for users is also important, such as the graphic user interface (GUI) which is the touch-based interface on mobile devices and a mouse or keyboard interface on desktop which are purpose for users to input the messages or interact with the service that provided.



(Appendix 9: Example GUI of WeChat)

- Advantages
 - a. GUI interfaces have provided an user-friendly interface to the users. *They are very attractive and visually impactful, making users more convenient for usage.* (*10 Advantages and Disadvantages of GUI | Benefits and Drawbacks of GUI*, 2022) Graphical User Interfaces are designed to be visually intuitive, and a good GUI makes learning to use an application a breeze.
 - b. It also can represent the complex data such as represent the data through graphs, images or text, making the information easier to understand. The use of widgets, icons, and other visual elements also can streamline interactions and present information effectively.
- Disadvantages
 - a. The GUI may be complex for new users as the multitude of features and options might overwhelm new users while generally user-friendly. Overloading the interface with too many elements can lead to a cluttered and confusing user experience and this both will cause a learning curve.
 - b. It will also be limited for visually impaired users as GUI may not be accessible to visually impaired users without additional accessibility features. The touchscreen sensitivity also can vary, affecting the accuracy of user input and lead to accessibility issues.

In addition, implementing a **voice interface** which refers to technology that allows users to interact with a computer system or application through voice commands. Such interfaces utilise voice recognition and speech synthesis technologies to allow users to operate and access information in natural language without the need to use a keyboard, mouse, or touch screen.



(Appendix 10: Example of Voice Record of WeChat)

- Advantages
 - a. Allows the users to interact with the app hands-free, which is particularly useful when users perform multitasking such as when they are driving but need to send an emergency message or call with their friends.
 - b. The task also can be performed faster because voice input can be faster than typing, This allows for quicker message composition and conversational

interaction with the app. For example, a girl chat with her friends by using voice input as the

- Disadvantages
 - a. Sometimes the accuracy of the voice interface is not stable, it will have some issues such as the misinterpretation. The voice recognition technology may error recognize users commands and lead to error words. For example, different users may have different accents, dialects or languages, the voice input is hard to accurately recognize the words.
 - b. Privacy concerns with the use of voice interfaces also need to be addressed, as voice interfaces may inadvertently pick up unintended conversations, posing the risk of privacy breaches. For example, when a user listens externally to a voice, the user has no way of knowing what the content of the voice is, which may result in the content of the voice being heard by others.

Usability Goals

Effectiveness

1. Edit Sent Messages

Enabling the editing of sent messages allows users to make quick adjustments in real-time without the need to delete and resend. This feature enhances user control over their messages, ensuring that information remains accurate and reducing potential misunderstandings. By allowing users to correct mistakes or update information seamlessly, the overall communication becomes more reliable and effective, leading to a better user experience. This capability is especially valuable in professional settings where the accuracy of shared information is critical. It reduces the need for follow-up corrections, thereby streamlining communication and saving time for both the sender and the recipient. Furthermore, the ability to edit messages can enhance the clarity of conversations, as users can refine their wording to better convey their thoughts.

2. Navigate to the location of the replied message

Enabling navigation to the original location of replied messages improves conversation continuity by allowing users to easily reference previous messages. This improves understanding and reduces confusion in ongoing discussions. With this feature, users can quickly trace back to the context of the conversation, ensuring that the flow of communication remains intact and making it easier to follow complex threads. This is particularly useful in group chats or long conversations where multiple topics may be discussed simultaneously. By providing a direct link to the original message, users can better understand the context of replies and maintain the coherence of the discussion, leading to more productive and effective interactions.

3. Message text styling options

Providing text styling options such as strikethrough, italic, bold, and underline improves message clarity and highlights important information. This feature enables users to communicate more effectively and creatively, improving message impact and understanding. This variety of text formatting tools allows users to emphasise key points, convey tone, and organise their messages more clearly, enhancing the overall readability and engagement of the conversation. For instance, bold text can be used to highlight critical information, italics can indicate emphasis or nuance, and strikethrough can show corrections or changes. These options enable users to convey their messages with greater precision and style, making the communication process more dynamic and engaging.

4. Visibility of user online status

Providing visibility into the online status of contacts helps users gauge availability and response expectations, optimising the timeliness of communications. This feature enhances the user experience by facilitating timely and effective communication. Knowing when a contact is online or available to respond helps users manage their time better and reduces the likelihood of missed messages or delayed responses. This is particularly beneficial in urgent situations where immediate feedback is required. Additionally, visibility into online status can foster more spontaneous interactions, as users are more likely to reach out when they know the other person is available. This

feature also helps manage expectations, as users can anticipate when a response might be delayed due to the contact being offline.

Efficiency

1. Gestures to reply to a specific message

Implementing quick gestures such as swiping and clicking the reply button to reply enhances user convenience and efficiency, enabling seamless interaction with messages. This feature enables users to respond promptly, promoting smooth online conversations. These intuitive gestures simplify the user interface, making it easier for users to engage with messages quickly and without unnecessary steps. For example, a simple swipe to reply action can save time and reduce the effort required to maintain the flow of conversation. This can be particularly useful in fast-paced chats where quick responses are necessary to keep up with the dialogue.

2. Reply message by picture or sticker

Allowing the option to reply to messages with images or stickers enriches communication by adding expressiveness and depth to conversations. This feature not only meets modern messaging expectations but also enhances user engagement and improves the overall quality of interactions. Visual elements like images and stickers can convey emotions and reactions more vividly than text alone, making conversations more lively and engaging. This capability supports a more nuanced and multifaceted communication style, enabling users to express themselves more fully and creatively. Whether it's sharing a relevant photo or using a fun sticker to react to a message, these options can make interactions more enjoyable and efficient.

3. Reply to voice message

Allowing users to reply to voice messages with their own voice provides a personalised and efficient mode of interaction. This accommodates different communication preferences and increases user satisfaction. Voice replies can be more nuanced and expressive, providing a richer context for the conversation and allowing for quicker, more natural exchanges. This feature is particularly useful for users who find it easier to speak rather than type, or for situations where vocal tone and inflection can add significant meaning to the message. Additionally, voice replies can save time and reduce the effort required to communicate detailed information, making the conversation flow more smoothly and efficiently.

4. Adjust voice message playback speed

Introducing playback speed control for voice messages allows users to customise their listening experience. Users can adjust the playback speed to quickly skim through messages or listen attentively, optimising voice message consumption. This flexibility caters to different listening needs and preferences, making it easier for users to manage their time and consume voice messages in a way that best suits them. For instance, users in a hurry can speed up playback to quickly get through a message, while those who need to catch every detail can slow it down. This feature enhances the usability of voice messages, making them a more versatile and user-friendly option for communication.

Satisfaction

1. Cloud storage backup options

The introduction of cloud storage backup options ensures data security and accessibility and prevents loss due to device problems. This meets modern user expectations for secure data management and increases overall user confidence. With cloud backups, users can rest assured that their data is safe and easily recoverable, which is essential for maintaining trust in the messaging platform. This feature also allows users to access their messages and media from multiple devices, enhancing convenience and flexibility. In the event of a device malfunction or loss, users can quickly restore their data, minimising disruption and maintaining continuity in their communication.

2. Noise cancellation in video calls

Integrating noise cancellation technology in video calls enhances audio quality, making conversations clearer and more professional. This improvement is critical for both personal and business communications, ensuring effective remote communication. By reducing background noise, users can enjoy more focused and productive conversations, regardless of their environment. This feature is particularly valuable in noisy or shared spaces, where background sounds can be distracting. Enhanced audio quality can lead to more satisfying meetings and discussions, as participants can hear each other clearly and focus on the conversation without interference.

3. Voting in group chats

Introducing a real-time vote function in group chats facilitates collaborative decision-making. This feature enhances interaction, encourages participation, and promotes consensus-building among group members, improving overall group dynamics and user satisfaction. Voting features make it easier to gather opinions and make collective decisions quickly, which is especially useful in group projects or social planning. This functionality supports democratic processes within groups, ensuring that everyone's voice is heard and considered. It can also streamline decision-making by providing a clear and organised way to tally votes and determine outcomes, making group interactions more satisfying.

4. Star important messages

Allowing users to star important messages in chats with different users provides easy access to key details without having to search through chat history. This feature facilitates efficient information retrieval. By marking significant messages, users can quickly reference important information, such as addresses, phone numbers, or key points from a discussion, thereby saving time and improving satisfaction. This capability is especially useful in lengthy or active chats, where finding specific messages can be time-consuming. Starring important messages helps users stay organised and ensures that critical information is always within easy reach, enhancing the overall user experience.

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