**ASSIGNMENT # 2**

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**TASKS**

**Question # a:**

Software revamping is a process of programming advancement that is done to work on the practicality of a software system. Revamping is the assessment and change of a system to reorganize it in another structure. This cycle envelops a mix of sub-processes like figuring out, forward designing, remaking, and so on. Revamping is used to adjust existing systems to make them more sustainable. It is utilized to depict a cost-effective choice for system development and the activities engaged with the product support process.

**Question # b:**

Large software products need to be constantly changing to adapt to changing environments. Examination of historical data from legacy software systems has identified three specific causes for this change:

1. Adding new features.
2. Correcting faults.
3. Restructuring code to accommodate future changes.
4. Decision makers changing over the period of development.
5. As developers learn how to solve the problems, they improve things.
6. Preserving backwards compatibility with existing clients.

**Question # c:**

**Facebook**

**Main Functionalities:**

**Graphical user interface, application

Description automatically generated**

1. **Groups:**

A group allows you to interact with others and give members unique information.

A screenshot of a video game

Description automatically generated

1. **Profile:**

Your information will be stored on your Facebook profile. Your profile can include information such as your name, photo, birthplace, employment, educational history, and so on.

**Graphical user interface, application

Description automatically generated**

1. **Newsfeed:**

This is where you’ll see all of your friends’ updates. You’ll also get notifications from business pages you’ve liked. Your posts will also show in the Newsfeed, where your friends will see them.

**Graphical user interface, website

Description automatically generated**

1. **Status/Post:**

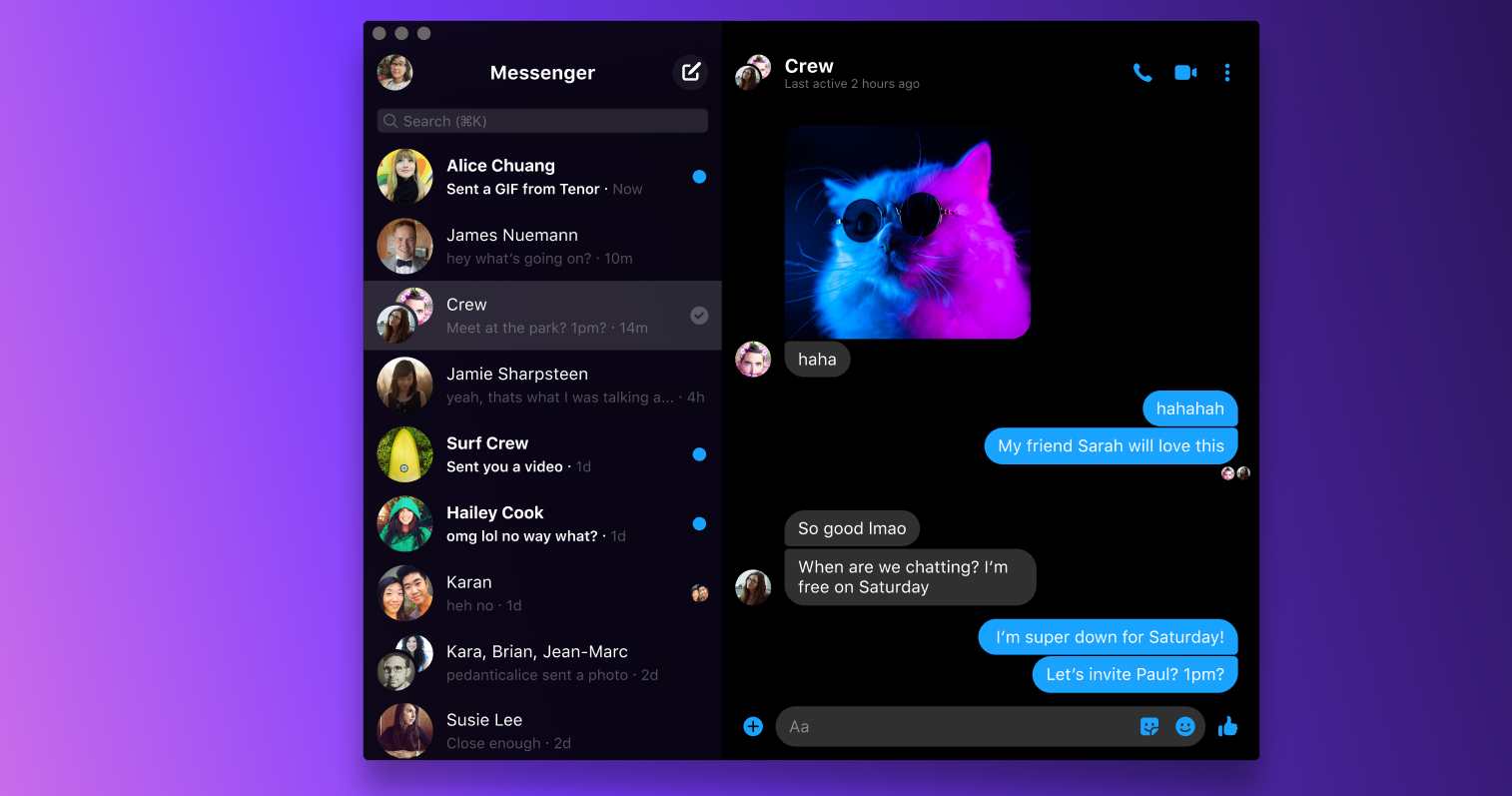
Facebook uses the term “post” to designate something you publish on your Newsfeed. Text, photos, videos, and location are just a handful of the different sorts of postings you may post to your friends’ newsfeeds.

**Graphical user interface, application

Description automatically generated**

1. **Messages:**

Your followers/Friends can talk with you on Facebook Messenger. Facebook now encourages us to include the messenger button in our posts.



1. **Friends:**

These are persons to whom you’ve made a request, and they’ve accepted it, or people to whom you’ve accepted a request. Unlike other social networking sites, where someone can follow you without following them back, Facebook’s friend system needs you and the other person to be friends.

**Graphical user interface, application

Description automatically generated**

1. **Events:**

Individual users and companies may advertise events on Facebook because there is so much community there. RSVPs may be accepted, a guest list can be created, and the date, time, and place of the event can be shared.

**Graphical user interface, text, application, chat or text message

Description automatically generated**

1. **Live streaming to multiple pages:**

When it comes to connecting with your Facebook fans, live streaming is the most effective technique. I would even advise you to develop your program and have structure around your live broadcasting. When you broadcast material to your audience, you will improve your expertise and encourage engagement, not to mention that your videos will receive six times more views when you are living.

**Graphical user interface, application

Description automatically generated**

1. **Stories:**

Facebook Stories are short user-generated photo and video collections that can be viewed up to two times and disappear after 24 hours.

**Graphical user interface, application

Description automatically generated**

**Language and Technical Details:**

The entire system is Hack -- an enhanced PHP. Facebook uses custom-style libraries to make writing pages quite easy. Backend services are most commonly in C++. Configuration management is in Python as are many utility services. Things that cope with Hadoop / HBase are written in Java, as is the user message system. Facebook is using ReactJS as its core programming language, as PHP has some lacuna in it. Facebook also uses Thrift to abstract interfaces between all the systems so Hack code can talk to a C++ service which talks to a Java service which talks to a Python script.

**Question # d:**

Features that Facebook need to include in their revamped version are:

1. **Ask for Stronger Passwords:**

Facebook allows weak passwords, making it simpler for hackers to obtain access to the account. As a result, the user should be asked for their password repeatedly until they input a more secure or stronger password.

1. **Improve Live Steaming:**

Given how popular live streaming is on other platforms like Youtube and Instagram. Facebook should enhance its performance during live streaming as many businesses generate revenue through live streaming.

1. **Fake Accounts:**

Another major issue is fake accounts. Fake accounts are used to disseminate false information and defraud other users. The problem with this has only gotten bigger over the years. There's still large influx of fake accounts which poses a security threat to other users. In the beginning, Facebook depended heavily on users to report phoney accounts, leaving a substantial number of bogus accounts unverified. A possible solution to this problem could be making the account registration procedure stricter by partnering with governments on some level to get authentic CNICs or ensuring that numerous accounts cannot register using the same IP address.

1. **Hate Speech:**

Hate speech detection has to improve a lot. There's also lots of bullying. AI developers have to restructure their models and algorithms at backend so accounts indulging in bullying/hate speech are immediately detected and thus blocked/deleted.

1. **Categorizing Posts:**

Categorizing posts entails grouping your articles into relevant categories. This option is available for pages that consistently post on any topic. People may subscribe to any of the categories they like and stay on that page for as long as they wish. People will have an easier time finding information if they receive filtered updates like this. A page, for example, can organise its posts into categories like Technology, Cooking, Offbeat, Entertainment, and more. The administrator of a Facebook page can categorise their posts so that only those who have subscribed to that category will see them in their newsfeed.

1. **Dragging File to Chat Window:**

To send a file to a Facebook friend, you must first open the complete discussion, then choose a file, and finally click enter to send. What if Facebook allowed you to share files instantaneously, such as when you drag a file into a friend's chat window and it sends? This makes it possible to deliver files more quickly. Only in conversation can you share private photos. To send a photo or other file, simply drag it into the chat box.

**Question # e:**

Following are some automated tools that would be helpful for revamping a software:

1. **FileX:**

Framer X is React-based, allowing engineers to build on Framer prototypes and designers to leverage production components directly in their designs, bringing design and engineering closer together once more.

1. **Sitemaps:**

The strategy phase of a website redesign project is the initial stage. You'll be ready to establish the layout of your site by creating a sitemap once you've detailed your goals, personas, essential assumptions, path map, and wish list. A sitemap should show all of the pages in the new site and how they relate to one another. The document will be referenced frequently during the redesign process, therefore it must be freely available to all team members. A recommended software for this would be Gliffy.

1. **Project Management:**

Your project manager should set up all tasks and deadlines for the redesign after your sitemap is finalised. They need a centralised project management platform to keep track of each team member duties and ensure everything is on schedule for launch. File uploads, comments, scheduling, and task assignments should all be possible with your project management software. For this Teamwork will be a best fit.

1. **Quality & Assuarance Testing:**

It's critical to test your website's look and functioning across all major browsers and devices before launching it. You may miss possibly mismatched parts or faulty functionality if you don't test from a range of sources. Unresolved issues may hinder a prospective consumer from converting. While there is some overlap in browser compatibility between Mac and PC, a few essential apps like Safari, Internet Explorer, and Microsoft Edge are incompatible. As a result, you should consider purchasing cross-browser testing tools such as Lamdatest.

1. **Observational Tracking:**

Installing observational monitoring software after the launch to see how visitors engage with your new site is beneficial. Although some user research may have been used during the planning phase, the majority of the changes were most likely made based on assumptions. Observational tracking can confirm or refute those assumptions, leading to informed modifications that improve user experience over time (UX). For this function, Hotjar is the go to software.