Programming 4<u>kids</u> Final Project (1) Ask.fm

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Ask.fm

- We all familiar with the ask.fm site
- People ask questions and others answers them
- Let's implement a simple version of it (~650 lines of code)
 - This is a small project.
 - CV one may be 5000+ lines of code
- In future, try to expand the project with more real features!
 - Compare and decide one feature to add, and so on

AskMe - Big Picture

- This is files-based system
 - Every time the user run it, you see the previous state (users/questions/answers)
 - Multiple users can use it in same time (parallel)
 - You send question. I see it
 - I answer the question or remove it, you see this update
- Login/Sign up/Sign Out
 - Any system allow a user to sign up (name, email, password, username, password)
 - Also: As a user do you allow anonymous questions?
- User operations
 - Print questions: From you, To you, Feed Questions
 - Ask and answer questions. System support threads
 - Delete a question (which might be a thread)

AskMe: Design

- Every user has a system generated ID
 - Same for every question
 - We can view these IDs on the site (not realistic)

A thread question

- o If a question is answered. Others can ask questions in the original question thread
- E.g. original question is parent for all of them
- If this parent question is removed, the whole thread is removed

Correctness

- You can't do something wrong!
- E.g. you can't remove a question ask to someone else!
- You only see/edit the details of your question

AskMe: Login

```
Menu:
        1: Login
        2: Sign Up
Enter number in range 1 - 2: 1
Enter user name & password: mostafa 111
Menu:
        1: Print Ouestions To Me
        2: Print Ouestions From Me
        3: Answer Question
        4: Delete Question
        5: Ask Question
        6: List System Users
        7: Feed
        8: Logout
Enter number in range 1 - 8: 1523
ERROR: invalid number...Try again
Enter number in range 1 - 8:
```

- My system already has 3 users and several questions
- Let's login and see menu

AskMe: Print Questions to me

```
Enter number in range 1 - 8: 1
Ouestion Id (101) from user id(11) Ouestion: Should I learn C++ first or Java
       Answer: I think C++ is a better Start
       Thread: Question Id (203) from user id(11) Question: Why do you think so!
       Thread:
                       Answer: Just Google. There is an answer on Quora.
       Thread: Ouestion Id (205) from user id(45)
                                                       Question: What about python?
                                        Ouestion: Is it ok to learn Java for OOP?
       Thread: Ouestion Id (300)
       Thread:
                       Answer: Good choice
       Thread: Question Id (302)
                                        Question: Why so late in reply?
Ouestion Id (301) from user id(11)
                                        Ouestion: Free to meet?
```

AskMe: Print Questions from me

```
Enter number in range 1 - 8: 2

Question Id (211) to user id(11) Question: It was nice to chat to you Answer: For my pleasure Dr Mostafa Question Id (212) !AQ to user id(45) Question: Please search archive before asking NOT Answered YET
```

- !AQ = ! Anonymous question
 - It means the other guy can see my ID

AskMe: Answer and Delete

```
Enter number in range 1 - 8: 3
Enter Question id or -1 to cancel: 101
Question Id (101) from user id(11) Question: Should I learn C++ first or Java
Answer: I think C++ is a better Start

Warning: Already answered. Answer will be updated
Enter answer: C++ is really a good choice
```

- Answered question (101)
 - We overwrote answer
- Also we deleted question (300)

```
Enter number in range 1 - 8: 4
Enter Question id or -1 to cancel: 300
```

AskMe: Updated system

AskMe: Listing system users

```
Enter number in range 1 - 8: 6
ID: 45 Name: ali_wael
ID: 13 Name: mostafa_saad_ibrahim
ID: 11 Name: noha_salah
```

AskMe: Ask question, not a thread

```
Enter number in range 1 - 8: 5
Enter User id or -1 to cancel: 11
Note: Anonymous questions are not allowed for this user
For thread question: Enter Question id or -1 for new question: -1
Enter question text: Noha, How old are you?
```

AskMe: Listing the users feed

Answer: For my pleasure Dr Mostafa

```
Enter number in range 1 - 8: 7

Question Id (101) from user id(11) To user id(13) Question: Should I learn C++ first or Java

Answer: C++ is really a good choice

Thread Parent Question ID (101) Question Id (203) from user id(11) To user id(13) Question: Why do you think so!

Answer: Just Google. There is an answer on Quora.

Question Id (211) To user id(11) Question: It was nice to chat to you
```

AskMe: Ask question, in a thread

```
Enter number in range 1 - 8: 5
Enter User id or -1 to cancel: 11
Note: Anonymous questions are not allowed for this user
For thread question: Enter Question id or -1 for new question: 211
Enter question text: Please don't forget emailing the slides
```

AskMe: Let's login by Noha user

```
Enter number in range 1 - 8: 1

Question Id (211) Question: It was nice to chat to you Answer: For my pleasure Dr Mostafa

Thread: Question Id (304) from user id(13) Question: Please don't forget emailing the slides

Question Id (303) from user id(13) Question: Noha How old are you?
```

```
Question Id (101) !AQ to user id(13)
Question Id (203) !AQ to user id(13)
Question Id (302) to user id(13)
Question Id (301) !AQ to user id(13)
Question Id (301) !AQ to user id(13)
Question: Why do you think so! Answer: Just Google. There is an answer on Question: Why so late in reply?

NOT Answered YET
Question: Free to meet?

NOT Answered YET
```

AskMe: Sign up

```
Menu:
        1: Login
        2: Sign Up
Enter number in range 1 - 2: 2
Enter user name. (No spaces): morad
Enter password: 444
Enter name: morad zeny
Enter email: morad@gmail.c
Allow anonymous questions?: (0 or 1)1
Menu:
        1: Print Questions To Me
        2: Print Questions From Me
        3: Answer Question
        4: Delete Question
        5: Ask Ouestion
        6: List System Users
        7: Feed
        8: Logout
Enter number in range 1 - 8:
```

AskMe

• Let's Demo parallel sessions

تم بحمد الله

علمكم الله ما ينفعكم

ونفعكم بما تعلمتم

وزادكم علمأ