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12/17/2018
IOS

Final Project Documentation

Product Definition Statement

Most colleges in the nation have created an app exclusively for their students. Each colleges' apps' features are not always similar to others. Some have features in their app that are better developed than others. Other colleges, sometimes, attempt to copy these feature without asking their permission. Some apps are created by programming students from that school and they provide it for all the other students to use for their school exclusively. The students are usually not willing to share their app to other colleges because they have no idea what kind of system another college has. Besides it, incoming students entering into college have great opportunity to access the college's website or app. They can dropbox their homework, and contact staff or tutors through the app(s). However, students who are in Middle school or High school can't access the same kind of features that college's have in their apps. Sometimes, they can use Google Classroom to see their homework or dropbox. Some features are missing in Google Classroom like the ability to contact the staff. I aspire to create an app that includes most popular features from college apps and provide to all students from Middle school to High school in the nation. I want to make sure all students can use my app to gain experience before they prepare to enroll into their selected college and, of course, saving their time in their academic life.

List of Features I Implemented

- Able to Sign in

- Able to Log out

- Prevent someone from entering into another person's account
- Display a list of classes

Wish list of features I could put in the next version

- Pay for meals without physical money or credit card:

    ○ Some schools require students to pay for lunch and breakfast. Student can lost money or forget to bring it. Student can use app to pay food without asking their parents' credit card number.

- Contact tutor directly from their school

    ○ Some students use Chegg for tutor time, but they are required to pay for that tutor. Also, the tutors are usually older and strangers. This could make students feel insecure. The app should set up a tutor coming directly from the child's school, which is free.

- Receive warning message

    ○ Student should not turn on to "Don't disturb" feature. They possibly miss what's going on outside school while they are in class. Warning message will be sent to all students and all staffs.

- Create Message and Send it

  - Just type message and send it

- View classmates of each class

  - Display all classmates' info like name or email

- View Schedule

  - Display the class schedule

- Drop homework

  - When student finishes their homework, they dropbox it.

Grade

I think I don't do so well. My app has about 21 pages and still has a lot of missing features. It doesn't have features of creating cards, creating message, and paying food. I believe my project needs one more member to complete this project because 21 pages are a lot things to do. Luckily, I have some knowledges about how to build ios with the internal services like property lists. I decide to challenge myself to use the webservice in the a few days. While I'm working on my project, I realize my app requires me to do a lot of working with the web services. I need to write queries with php files for updating it, deleting it, and etc, but my time is running out. Writing the webservice is the key of my project because my app needs to get data from the web service. If I finishes all queries, making my project will be easy. I wish I should practice more how to build ios with web service in 5 weeks ago. I will say I could have bad plans to make my projects and get the bad result on my project.

Describe

viewController

- Login and download json of a list of all user and its password from the web services

viewPersonal

- Your profile and a list of course and its due

Logout

urpwModel

- Get password and name from web services. Put them into Login page for checking password and name

homeworkData

- Download json of a list of all homework and its due from the web services

homeworkSend

- Get a list of homework and its due from web services. Put them into profile page. That page allows the user to view their homework and due.

Document

Like I mentioned in Grade section, I don't meet all requirements in my document like 75% because the time is running of out. I do it at the last minutes, which is bad idea. Luckily, my app is able to get data from the web service and displays a list of course on a profile page. Writing queries in php file is definitely consuming my time a bit, but it is worth to learn new something. Honestly, writing two different programming languages drives me crazy because their syntax seems it is trying to confuse me. I wish I can do it early because I don't realize writing the web service is a lot working before IOS can retrieve data from this web services. Writing the web service is not mentioned in my document, and I don't expect it is necessarily included in the my project. Next time, I need to note the webservice in my document for the future.

I don't use any third-party framework. While I'm working on my project, of course, I really get frustrated how to get data from the web service. Also, some buttons' functions have issues. Luckily, I ask Jose Lopez, my good friend. He has good knowledges with swift stuffs. He fixes two things

In php file, I always get one result of homework and its due. I can't get a list of homework and its due. My friend adds temp variables and use array_push() methods.

$data = $db->getAllHomework();

```php
foreach ($data as $account) {

        $tempArray['homework'] = "{$account->getHomework()}";

        $tempArray['due'] = "{$account->getDue()}";


        array_push($response, $tempArray);

    }



    echo json_encode($response);
```

In swift file, my login is not able to go to the different pages due to the button function. Also, the data from the web services is always null because it is separated from task function. He adds **DispatchQueue.main.async** due to the conflicted thread. Also, he

moves those codes in the task function and it works.

```swift
DispatchQueue.main.async {



        print(self.location.user, self.location.pw)



        print(ur, pw)



        if (self.location.user != ur) && (self.location.pw != pw) {



            // Display an alert message

            let myAlert = UIAlertController(title: "Alert", message: self.location.message,
preferredStyle: UIAlertController.Style.alert);

            let okAction = UIAlertAction(title: "OK", style: UIAlertAction.Style.default,
handler:nil)

            myAlert.addAction(okAction);

            self.present(myAlert, animated: true, completion: nil)

            return
```

```swift
        }else{

            let tabBarController =
self.storyboard?.instantiateViewController(withIdentifier: "myTabBar") as!
UITabBarController


            let appDelegate = UIApplication.shared.delegate as! AppDelegate


            appDelegate.window?.rootViewController = tabBarController


        }

    }
```