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# The DCS Codex Notification System

## User Interface Design

Submitted to:

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for the course  
CS 191 Software Engineering I  
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### ***Unique Reference:***

The documents are stored in the

<https://github.com/theswinghobo/DCSCodexApp/tree/master/03-Design%20Engineering>

The drive containing the prototype testing videos are located here:

<https://drive.google.com/drive/folders/14PR5PLoVnQfoeNOpvc4pgd4lXMV6TkW?usp=sharing>

### ***Document Purpose:***

The purpose of the document is to aid in the progress of creating the user interface of our project by helping us understand the current prototype and how to improve.

### ***Target Audience:***

The target audience is our professor in CS 191, Ma'am Solamo, as a requirement for the course and ourselves to improve on our project.

### ***Revision Control:***

<b><i>Revision Date</i></b>	<b><i>Person Responsible</i></b>	<b><i>Version Number</i></b>	<b><i>Contribution/Modification</i></b>
10/18/19	Anica Galano	1.0	Initial document edits
10/18/19	Rogiella Isidro	1.1	Edited participant 1 schedule and video transcript
10/18/19	Anica Galano	1.2	Edited prototype description under Initial Prototype Link
10/18/19	Ken Tabagan	1.3	Added transcriptions for participants 2 and 3. Added schedule of participatory design for participants 2 and 3. Added to observations summary and prioritization
10/18/19	Anica Galano	1.4	Added screens for Sample Screens of the Revised Prototype

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# I. Participatory Design Guide and Protocol

This section provides the instructions on how to conduct a participatory design to assess the usability of the prototypes.

## A. Purpose

The purpose of the participatory design is to gather information on how users will interact with the application. It is also done to assess the usability of the application.

## B. Target participants

The target participants include students from different year levels under the Department of Computer Science.

## C. Participant's Consent

Participants will sign a consent form to participate in this activity. One copy of the informed consent should be given to the participants, and a second copy should be kept by the team. Participants should be informed that a video recording will be used as data collection.

The participation in this study is completely voluntary, and the participants may refuse to participate or withdraw from the study without penalty or loss of benefits of the group. They may withdraw by informing the team that they no longer wish to participate (no questions will be asked).

## D. Initial Prototype Link

The prototype satisfies the following scenarios:

- ★ **Welcome Screen**
  - Displays the logo and options to login or register.
- ★ **Login Screen**
  - Receives input of username and password, to be submitted to login to the app. After login, they are redirected to the **“Home Screen”**.
  - Contains a back button that returns to the **“Welcome Screen”**
- ★ **Registration Screen**
  - User is prompted to create a new account with the following details: email, username, student number and password.
  - A next button leads to the next cycle of the **“Registration Screen”**
  - The next cycle contains prompts the user to decide whether they want to subscribe or classes/organizations. If yes, they are brought to a checklist of classes/organizations and they can choose options and save their subscriptions. Otherwise, they can say no and move on.
  - After registration, they are redirected to the login screen.
- ★ **Home Screen**
  - Contained in the home screen is a calendar view of the Codex. Below are a list of notifications the user had

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received.

★ **Subscriptions**

- Contained here is a list with the active subscriptions of the user. Should they want to edit the notification setting (not yet applied) or to remove a single subscription they may do so.
- There is a button to add subscriptions (not clickable yet) and to remove all subscriptions.

★ **Notification Requests**

- All approved, pending and rejected notification requests are found here in a list.
- There is a button to create a new notification, which lead to the “**Make Notification Request**” screen.

★ **Make Notification Request**

- There are several inputs to make a request.
- If you try to click submit without completing the form, you will not be able to submit and will be prompted about missing fields.
- You can cancel creation of notification requests.

★ **Notifications**

- Pop up notifications appear at a given time. You can choose to dismiss or to be reminded later.
- When choosing to be reminded later, you can choose the duration of time before the reminder.

**Prototype Link:** <https://projects.invisionapp.com/prototype/DCS-Codex-App-ck1vowaf500kz8m01vjz8m10>

## E. Data Collection

The participatory design are recorded if agreed by participants, and transcribed verbatim for analysis. The recordings need to be securely stored. The transcription shall not contain information that would allow individuals to be linked to specific statements. Confidentiality will be strictly preserved. Another member of the team may take down notes. The notes will be analyzed later.

## F. Schedule of the Participatory Design

The participatory design can last about 5 minutes.

Participant	Date and Time	Venue
Primrose Pascua	10/18/19 - 04:00PM	Seminar Room, UP AECH
Lance Lim	10/18/19 - 4:15PM	2nd Floor, UP AECH
Sharlene Yap	10/18/19 - 4:25PM	2nd Floor, UP AECH

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## G. Participatory Design Protocol

**Welcome** and thank you for volunteering to take part in this participatory design. You have been asked to participate as your point of view is important. I realize you are busy and I appreciate your time.

**Introduction:** This participatory design is conducted to give us an idea of how users will be interacting with the user interface of our app and how we can improve it. Feel free to share any comments or suggestions you might have.

**Anonymity:** Despite being video taped, I would like to assure you that the discussion will be anonymous. The transcribed notes of the participatory design will contain no information that would allow individual subjects to be linked to specific statements. You should try to answer and comment as accurately and truthfully as possible.

**Conclusion:** Of all the things that you mentioned today, what would you say are the most important thing that we (developers) need to keep in mind.

Thank you for participating. This has been a very successful discussion.

Your opinions will be a valuable asset to the study.

We hope you have found the discussion interesting

If there is anything you are unhappy with or wish to complain about, please contact the local PI or speak to me later

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## II. Participatory Design Note

*Video Transcript:*

### Participant 1:

The participant commends our prototype. The participant asked for a password confirmation to be added and also asked about the filter option.

### Participant 2:

Ken: Hello, I am Ken Tabagan from the DCS Codex Notification App. This is a workshop for CS191 our app is about viewing the DCS Codex and receiving notifications from relevant classes and organizations. So I'm just gonna hand over to you the prototype right here and let you explore it

Participant 2: Okay so this is the login screen, I'm guessing. If I register, Oh I'm creating a new account. Wow. Wow. Wow. I think it's good to add a confirm password just to be safe.

[irrelevant chatter]

Participant 2: Anyway, what does this mean?

Ken: It allows you to subscribe to classes you are currently taking and receive notifications from these classes.

Participant 2: Ok, so if I say no?

Ken: You don't have to for this one

Anica: So for the purpose of this- what do you call this, test, can we ask you to subscribe to a class so can you go back?

Participant 2: Oh, okay.

Yeah, because to test one of the features you have to subscribe.

Participant 2: Ok, so I'm going to subscribe to CS130

Anica: 131.

Participant 2: 131. So it's the only thing, but in real life you should be able to check everything, right?

Ken: Yes

Participant 2: Save. Wow. I will subscribe to DCS Servers.

Anica: Yay.

Ken: Wow.

Participant 2: That's everything, ok. Save. I think it's also good to have a scrollbar so I know when the end of the scrolling is. Anyway, you can now log in. Wait, but if I go back the register button is gone. Shouldn't the register button still be there in the log in screen? Because I went back to the homepage.

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Ken: Possibly.

Participant 2: I just pointed out a small error. I also cannot close this menu once I open it?

Ken: You can use home.

Participant 2: It's the same thing nevermind. Alright. What else can I do? Subscriptions. This isn't what I picked, but this makes sense. I want to remove all the subscriptions-- I'll add subscriptions. I will subscribe to CS131 and save. No. Yes.

Ken: You'll go back to registration.

Participant 2: I'll go back to registration, but I've done this na. Ok so what else haven't I done? Oh, the notifications.

Ken: The notification requests.

Participant 2: Alright, so here's the notification requests. Overall though I really like the new subscriptions thing. I also like this. It's very clear and easy to understand. This is very weird though. Is this a specified format?

Ken: We can make it like a drop down thing.

Participant 2: Ok, that makes more sense.

Ken: Would that be better?

Participant 2: I think that would be better. If I cleared now what will happen?

Ken: It will disappear.

Participant 2: So if it's pending, I won't know if it's approved or will it reappear?

Anica: You can only clear once it's approved.

Participant 2: Ok. Wow that's a notification.

Anica: Try the remind me later option.

Participant 2: Remind me later? Wow I can remind after..

10 minutes.

Participant 2: Ok, save. Wow it reminded me at 8:10. That's actually really cool. I really like this. Does the notification only pop up when you're inside of the app?

Anica: No, outside rin.

Participant 2: Wow, that's really cool.

Anica: If you want to go back to the homepage, well it reminded you again. Do you want to go back to the homepage? Wow, you have more notifications!

Participant 2: Wow that's actually really nice there should be like an option to close this.

Anica: Oh that's good feedback, yeah.



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Participant 2: Other than that, yeah this is really good. I like it.

Ken: Thank you. Thanks so much for testing our prototype.

### Participant 3:

Ken: Hello, I am Ken Tabagan from the DCS Codex notification app. This is a CS191 requirement, our app is about viewing the codex and receiving notifications from classes that you're currently taking and as well as organizations that you want to subscribe to. So I'll just let you explore and you can register here. You can double tap, it simulates typing

Participant 3: Yes

Ken: So these are the lists of classes that you can subscribe to. You can scroll if you want.

Anica: For the purpose of this prototype testing you can choose 131 or 191. Now in the home page

Ken: If you have any comments just say so.

Anica: We can test out the subscriptions

Participant 3: So the ones that are glowing are the ones i can press? Subscriptions? Oh that's cool. So magpapakita siya here sa home if they have events?

Ken: If they have events.

Participant 3: Would it be color coded?

Anica: Yes.

Participant 3: Oh that's cute, okay

Anica: If you want to go back to subscription.

Participant 3: Oh, what's this?

Ken: Same thing you can double tap to simulate the typing.

Anica: So the reason why we have notif requests so it's for people who also want their own notifications to be sent out to the class

Participant 3: So like if someone texts you and says that ma'am can't come today you can, like, do that

Ken: Yeah

Anica: So that's like for example our sample message here says hey guys we are allowed to use front and coding for our workshop.

Participant 3: Oh, ok.

Anica: And if you submit it, your request is now pending.

Participant 3: Ok, that's cool.

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Anica: And in order to simulate time passing can you double tap for us so after a while it's like

Participant 3: Oh wow, its approved!

Anica: And after a while, double tap again.

Participant 3: You have received the notification! Wow, amazing

Ken: We found a bug

Anica: This is just a simulation, it's not the actual app. We have to fix our prototype.

Ken: Login.

Participant 3: What else is here?

Ken: Subscriptions. You can delete one if you want .

Participant 3: Ok just kidding! Alright, this is a nice idea though DCS Codex. Especially since tinatamad ako minsan magsulat ng mga "oh i have a quiz on" pero like sometimes I forget to write it down so it's a nice app.

Anica: Yay. Nice job!

Ken: Thank you!

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### III. Participatory Design Report

#### A. Observation Summary and Prioritization

Observation	Prioritization (using MoSCoW)
Add a confirm password (or type your password a second time) during registration for safety.	Should have
Change the time parameter in the notification/entry request into a drop-down menu for better clarity.	Should have
Add a way to close the notification screen on the home page	Should have

#### B. Sample Screens of the Revised Prototype

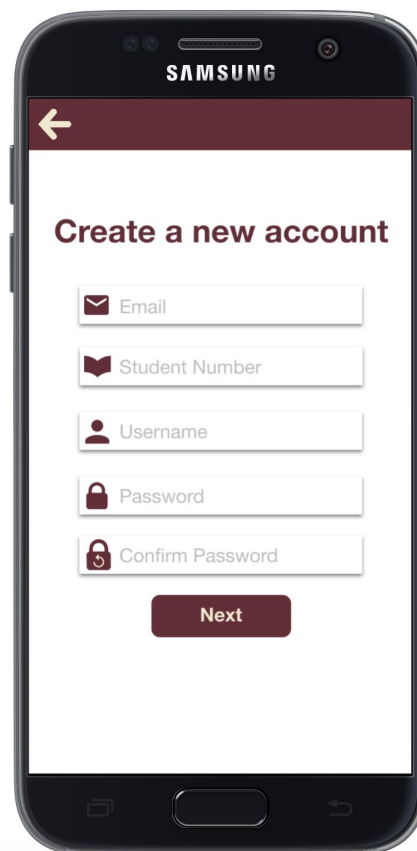
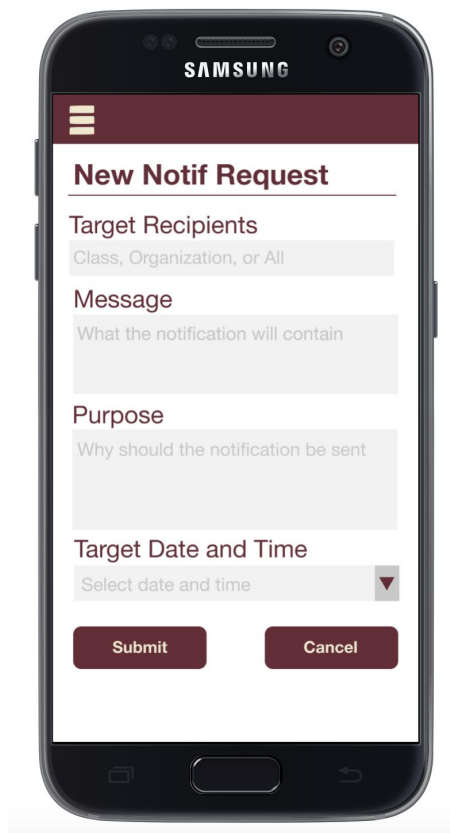


Figure 1: Added password confirmation input.



**Figure 2: Changed “Target Date and Time” input to a dropdown menu**

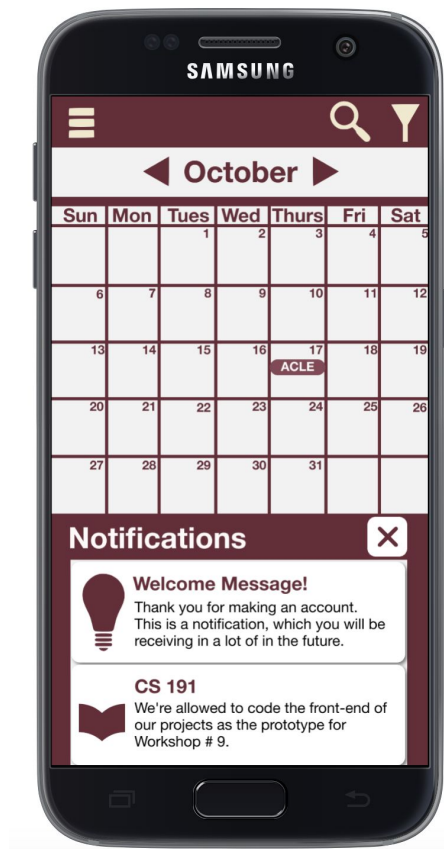


Figure 3: Added button to close the notifications segment.

## C. InVision Link(s):

Revised Prototype:

<https://projects.invisionapp.com/prototype/DCS-Codex-App-Revised-ck1w09fl301gy7g01y63ngbbz>