# Milestone 3

# **Bright Solutions**

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# **DRC Testing Portal**

#### List of Features

#### Homepage:

- **Profile Button** This navigates users to the Profile page for setting up profile settings.
- Accommodations Button This navigates user to Accommodations page for setting up testing accommodations.
- Schedule Button This navigates users to the Test Scheduling Form.
- Home Button This button can be used to go back to the home screen.

#### **Profile Page:**

- **Personal Information** This section provides users information about them regarding their first and last name, middle name, preferred name, school ID, date of birth, and gender.
- **Permanent Address** This section displays where a user lives and can be Reached indefinitely.
- **Contact Information** This section provides information on how to contact a user including their email, phone number, and their preferred way of contact.
- Local Address This section is to indicate where an individual lives currently and locally if they need to be reached.
- Home Button This button can be used to go back to the home screen.
- Accessibility Settings Provides two options for users to adjust portal settings to accommodate their disabilities and includes:
  - **High Contrast** Gives the user the opportunity to change the color scheme of the page to accommodate for color blindness or any visual disabilities an individual may have.
  - Large Text Gives the user the option to increase text and font size to better aid them when using the site.

## Accommodations Page:

- **Class Dropdown** Lets users select the class they're making accommodations for.
- **1.5x Time Checkbox** Lets users request to have an extra 1 and a half hours time to take the tests they schedule with the disability resource center.
- **Reduced Distraction Environment Checkbox** Lets users request to take tests in an environment with reduced distractions.

- Set Button Users would then press the Set button to apply the requests they have selected and receive a message that indicates that their accommodations have been set as well as a confirmation email. They would then be asked to return to the home screen.
- Home Button This button can be used to go back to the home screen.

# Schedule Page:

- Select Class Dropdown Lets users select the class they're scheduling a makeup for.
- **Request Type Dropdown** Lets users select what type of exam they will be taking (a regular exam or a final exam).
- **Date Dropdown** Lets users select the date they want to take their test.
- Time Dropdown Lets users select the time they wish to take their test at.
- Add Exam Request Button After filling out the form to schedule a test, users would then press the Add Exam Request Button to finish scheduling their test. Users would then be notified that they will receive an email notification soon verifying their request and asked to return to the home screen.
- Home button This button can be used to go back to the home screen.

# Screenshots & Narrative of System in Action



This is the homepage of our prototype. The homepage has three buttons a user can utilize to view their profile settings, to set up their testing accommodations for when they take exams at the DRC, and to schedule tests to be taken at the DRC. If a student wanted to access their profile, they would go to the profile button.

Accessibility S	ettings		
<ul> <li>High Contrast</li> <li>Large Text</li> </ul>			
Personal Inform	John	Note: This informatic school's database. If y information, please u	on is taken from your ou need to update the se your school portal
Last Name: Middle Name:	Smith Ron	Contact Inform	ation
Preferred Name (optional): School ID:	Johnny 123456789	Cell Phone Number: Land Line Phone Number:	(555) 345-9876 Not Specified
Date of Birth:	01/21/1990	Email Address:	jsmith@school.edu
Gender:	Male	Preterred Contact:	Email
Permanent Add	iress	Local Address	
Street Address:	555 Fifth Road	Street Address:	777 Seven Street
City:	Atlanta	City:	Athens
State:	GA	State:	GA
ZIP Code:	30066	ZIP Code:	30605

This is an example of what a student's profile page would look like. Here, a student can view their personal information as well as their living addresses and contact information. Instead of making a student fill out their private information after logging into their DRC portal, the portal simply looks at the student's Athena account, and students would edit such information on Athena. The profile page also provides students the option to change the settings of the portal to accommodate for their disabilities, specifically visual impairments. Two options are provided: High Contrast and Large Text modes.



The high contrast mode is there for students who need to change the color settings of the page to better view what is on the page. It is also helpful for those that are color blind as can be seen above.

9 PROFILE	*
Accessibility Setting High Contrast Large Text	S
Note: This information is taken from need to update the information, plo	your school's database. If you ease use your school portal
Personal Information	1
First Name: Last Name: Middle Name: Preferred Name (Optional): School ID: Date of Birth: Gender:	John Smith Ron Johnny 1234567890 01/21/1990 Male
Contact Information Cell Phone Number: Home Phone Number: Email Address: Preferred Contact:	(555) 345-9876 Not Specified jsmith@school.edu Email
Permanent Address	
Street Address: City: State ZIP Code:	555 Fifth Road Atlanta GA 30066
Local Address	
Street Address: City: State ZIP Code:	777 Seven Street Athens GA 30605

If a student was having a hard time reading the text of the page, all they would need to do is to check the Large Text option to make the portal more legible for them as can be seen above.

# **e** Profile

# Accessibility Settings

High Contrast

Large Text

Note: This information is taken from your school's database. If you need to update the information, please use your school portal

(?

<b>Personal Information</b>	ו
First Name:	John
Last Name:	Smith
Middle Name:	Ron
Preferred Name (Optional):	Johnny
School ID:	1234567890
Date of Birth:	01/21/1990
Gender:	Male
Contact Information	
Cell Phone Number:	(555) 345-9876
Home Phone Number:	Not Specified
Email Address:	jsmith@school.edu
Preferred Contact:	Email
Permanent Address	
Street Address:	555 Fifth Road
Citv:	Atlanta
State	GA
ZIP Code:	30066
Local Address	
Street Address:	777 Seven Street
City:	Athens
State	GA
ZIP Code:	30605

If a student required both accessibility options, then this is what the page would look like with both options selected as can be seen above.

<b>e</b> Profile	*
Accessibility Settings	
<ul> <li>High Contrast</li> <li>Large Text</li> </ul>	
Personal Information	Note: This information is taken from your school's database. If you need to update the information, please use your school portal
Last Name: Smith Middle Name: Ron Preferred Name (optional): Johnny School ID: 123456789	Contact Information Cell Phone Number: (555) 345-9876 Land Line Phone Number: Not Specified
Date of Birth: 01/21/1990 Gender: Male	Email Address: jsmith@school.edu Preferred Contact: Email
Permanent Address	Local Address
Street Address: 555 Fifth Road City: Atlanta State: GA	Street Address: 777 Seven Street City: Athens State: GA
ZIP Code: 30066	ZIP Code: 30605

Of course, if a student did not want these settings applied to the portal, they would just have to unselect both options to get the previous settings, like the screen shot above. To get back to the home page, you would click on the home icon in the top right corner of the page.



Once back on the home page, if a student wanted to set up testing accommodations, they would click on the Accommodations button.

• ACCOMMODATIONS		*
Select a Class		
Select Accommodations		
Time and a Half (1.5x Testing Time)	Reduced Distraction Environment	
	SET	

This is the accommodations form. Using the form, a student can select the class they wish to set up accommodations for.

alact a Class		
	CSCI 1301	
elect Accomm	STAT 2000	
	SPAN 2001	
Time (1.5x Test	ENGL 1102	Reduced Distraction

The Select a Class dropdown will display all the classes a student is taking. This information is also taken from the student's Athena account to make it easier on the student to set up testing accommodations.

• ACCOMMODATIONS	*
Select a Class CSCI 1301	
Select Accommodations	
Time and a Half (1.5x Testing Time) Reduced Distraction Environment	
SET	

After selecting the desired class (in this example, CSCI 1301), students will be presented with two testing accommodations they can choose to include while they take their exams.

ACCOMMODATION	IS			*
Select a Class	CSCI 1301			
Select Accommod	ations			
Time and (1.5x Tes	l a Half ting Time)	Reduced Environ	l Distraction nent	
	SE	T		

Students can choose to have an extra hour and a half of time applied when taking their

tests.

• ACCOMMODATIONS	*
Select a Class CSCI 1301	
Select Accommodations	
Time and a Half (1.5x Testing Time) Reduced Distraction Environment	
SET	

Students can also choose to have a reduced distraction environment for their test.



In this case, we will apply both accommodations and click the set button.

• ACCOMMODATION	S			*
Select a Class	CSCI 1301			
Select Accommoda	tions			
Time and (1.5x Test	a Half ing Time)	Reduc Enviro	ed Distraction nment	
	SE	т		

Success! You will receive a confirmation email shortly. Please return to Home screen.

A short message will appear to notify the student that they have successfully applied accommodations for their class. They will also receive a confirmation email and are asked to return to the home screen.



After going back to the home page, a student could then schedule an exam for their class by clicking on the Schedule button.

Select a Class	Date	
		•
Request Type	Time	
		•

They would then be taken directly to the test scheduling form. Here they can select which class they would like to schedule an exam for.

elect a Class	Date
CSCI 1301	
STAT 2000	Time
SPAN 2001	
ENGL 1102	

Similar to the accommodations form, the Select a Class dropdown will display all the classes a student is taking.

Select a Class	Date	
CSCI 1301		-
Request Type	Time	•

In this example, we will choose CSCI 1301. After picking the class to schedule an exam for, students would then be prompted to choose what type of exam they will be taking.

🛃 SCHI	EDULE AN EXAM	(
	Select a Class	Date
	CSCI 1301	
	Request Type	Time
	Exam	
	Final Exam	

There are two different types of exams students may take at the DRC: a regular class exam or a final exam.

S	elect a Class	Date	
	CSCI 1301		
F	Request Type	 Time	
(	Exam		<b>_</b>

# ADD EXAM REQUEST

We will go with the regular exam option. Once that is done, students will need to set the date they would like to take their exam.

00014004								_
CSCI 1301		(		An	ril 20	20		,
		s	М	т	W	T	F	s
Request Type	Time	29	30	31	1	2	3	4
Exam 🔻		5	6	7	8	9	10	11
		12	13	14	15	16	17	18
		19	20	21	22	23	24	25
Exam 🔻		5 12 19	6 13 20	7 14 21	8 15 22	9 16 23		10 17 24

The dropdown for the date will display a calendar with dates students can pick from. In our example, we will go with April 17.

CSCI 1301	nril 17 2020
	pm 11, 2020
Request Type Time	
Exam 🔻	

After choosing a date, the date input box will automatically display the date a student wants to take their exam.

Request Type	Time
Exam 🔻	
	8:00AM
	9:30AM
	11:00AM
ADD EXAM	12:30PM
	2:00PM
	3:30PM
	5:00PM
	6:30PM
	8:00PM

All that is left to fill out is the time a student would like to take their test at. Different time slots will be shown according to classes that occur on the days the class selected is usually held along with the time of the class. We will go choose 8 am.

Select a Class	Date
CSCI 1301 🔻	April 17, 2020 🔻
Request Type	Time
Exam 🔻	8:00AM

After filling out the form, students would then click the Add Exam Request button.



# You have successfully scheduled an exam!

You will receive an email notification soon.

Please return to the home screen.

Once the form is submitted, a message will appear to notify the students that they have successfully scheduled an exam and will receive email confirmation. They are then asked to return to the home page. Our goal was to simplify the test scheduling process and provide easier access to the testing form, and we designed our prototype with that vision in mind.

#### **Initial Usability Evaluation Plan**

We will gather a group of participants for the evaluation. We will aim to select 20 students from UGA who have previously used the existing Disability Resource Center (DRC) test rescheduling platform, because (a) they are the primary audience for our web application, (b) participants will be able to compare the new test rescheduling platform against the existing DRC platform, and (c) the participants would be more likely to have various disabilities such as ADHD or visual impairments. Their feedback will be especially useful in making our platform as accessible as possible.

The students will be brought to an evaluation room. The evaluation room will have a one-way mirror, a desktop computer, and a microphone with a recorder. Inside the room will be a developer from our team talking with the participant, and on the other side of the one-sided glass another developer will be taking notes on what the participant says and does.

We will be using a within-subjects study design. This means that each subject will be administered to accomplish each task. Since a within-subjects study design requires less participants, and because we believe the average participant will be committed to helping create a better test rescheduling portal as it is an interface they confront frequently, we believe it is the optimal design for our study. Another evaluation technique we could use is a between-subjects study design. Instead of each participant conducting every task, only one user at a time would perform one task. This would be just as valid as the within-subjects design and would require more participants to test out each task individually. This would place less of a burden on each participant to complete a task and would make it a faster process as they are only conducting one task. We would rather go with the within-subjects study design as it removes any potential biases and differences participants might have since all of them will be doing the same tasks in varying orders.

The usability specifications our team plans to optimize are learnability (time to learn how to do specific tasks), efficiency (time it takes to complete specific tasks), and error-rate (errors per task). These usability specifications are tracked throughout the monitoring process and through the questionnaires given to the participants.

The tasks are the following:

- Change your preferred name to "Alex"
- Ask to have 1.5x time for tests
- Schedule your CSCI 1301 test for April 15

They will each be administered to participants in a random order, different for each participant. The participant will complete a questionnaire before and after they complete each task. The users will then complete all the tasks again, filling out additional after questionnaires for each one. While completing each task, the user is asked to vocalize their thought process. Also while completing each task, the developer behind the glass will take notes of their thought process, count critical incidents, and time how long it takes each participant to complete a task.

# Before Questionnaire (taken once at the beginning)

Question	Answer
How long does it usually take you to complete the assigned task on the existing DRC platform?	minutes
Rate how frustrated you usually feel completing the assigned task on the existing DRC platform.	[not at all frustrated] 1 2 3 4 5 [very frustrated]

# Before Questionnaire (taken before each task)

Question	Answer
How many times have you previously used the DRC platform?	Roughly times
Rate how much you enjoy the aesthetic design of the existing DRC platform.	[I hate it] 1 2 3 4 5 [I love it]

## After Questionnaire (taken after each task)

Question	Answer
How long did it take you to complete the assigned task?	minutes
Rate how frustrated you felt completing the assigned task.	[not at all frustrated] 1 2 3 4 5 [very frustrated]

# After Questionnaire (taken once at the end)

Questions	Answers
How much do you enjoy the aesthetic design of this platform?	[I hate it] 1 2 3 4 5 [I love it]
How aware were you of what your status was while completing tasks?	[no clue where I am] 1 2 3 4 5 [know exactly where I am in the process]
How confident did you feel in navigating the platform?	[no confidence] 1 2 3 4 5 [totally confident]
How much more comfortable did you feel using the platform the second time you completed the task versus the first time?	[same level] 1 2 3 4 5 [way more comfortable]
How easily were you able to navigate away from the current task?	[very difficult] 1 2 3 4 5 [very easy]
How much did you feel you had to rely on your memory to help you complete tasks?	[not at all] 1 2 3 4 5 [very much so]
Overall, how would you rate your experience using this platform?	[terrible] 1 2 3 4 5 [fantastic]
Which platform would you prefer using?	Current DRC Portal or The New Prototype