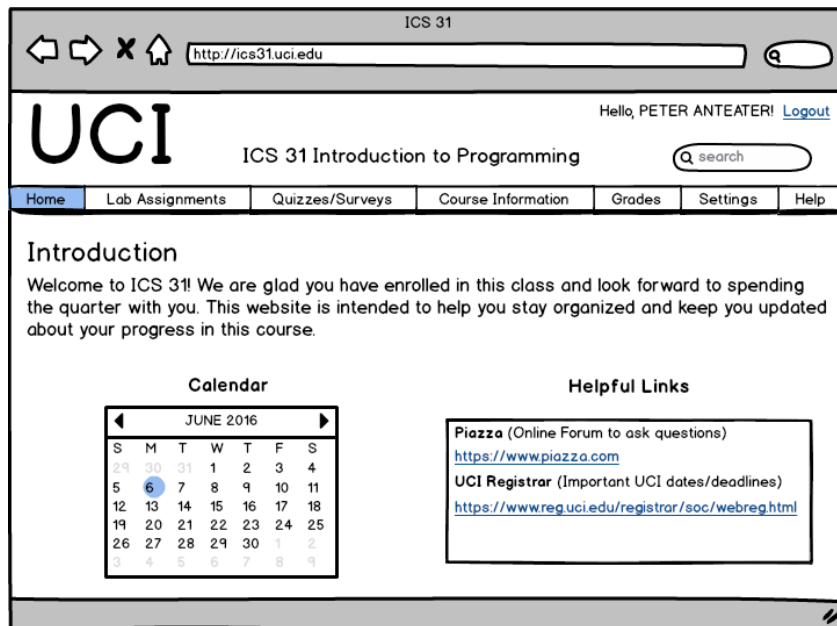Overall Design Explanation: I decided to make a simple UI that is similar to a lot of other websites that currently exist. I decided to do this because in Chapter 1 of Ware, a guideline presented was to "adopt tools that are consistent with other commonly used tools"(Ware, 24). Using a standard website layout would make it easier for users to learn how to use the website since it is similar to many other websites that they have used before.  It has the standard menu bar at the top of the page, it has a greeting with the name of the user and logout button on the top right, and it has a search bar. My decisions on what should be on the menu bar were influenced by what Ware had mentioned in the section about sensory representation. In this section, Ware presented a fundamental principle that read "Important data should be represented with graphical elements that are more visually distinct than those representing less important information"(Ware, 14). He then says that "Important information should be easy to find"(Ware, 14). These two statements made me think about the purpose of the website and what users wanted to see. I narrowed it down to home, lab assignments, quizzes/surveys, course information, grades, settings, and help. I chose lab assignments, quizzes/surveys, course information, and grades because those were the main focuses in the questions provided in the description of the assignment. I used a sans serif text because in one of our last lectures titled "Words", Professor Olson talked about when to use san serif versus serif. Since websites are sometimes projected onto large screens, it is better to have the text on the website be san serif because serif is hard to process on large screens. Also, when looking at different websites, most of them use a san serif font to display information on their site.

**Home Page**



The homepage is the place where users will be greeted once they sign in using their UCInetid. They can click through the tabs on the menu bar at the top and it will lead to those related topics. When a user clicks on a date on the calendar, it will show them if there are any assignments, quizzes, midterms, or finals due that day. The user can also add important dates or import an already existing calendar with due dates provided by their instructor. I add the Piazza link to the home page because the users might want to go to the Piazza page. Since the question "Who has given a lot of useful responses on Piazza" is subjective, it is hard to create a visualization because everyone has different opinions on what is deemed "helpful". The instructor will probably have to go on to Piazza and look at every post and determine if that student has contributed useful responses.

## Lab Assignments(Student View)

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Home > Lab Assignments

## Lab Assignments

This page is where you will have the options to **select a partner**, **evaluate a partner**, and **view** and **submit** your lab assignments. Please note that you are not permitted to have duplicate partners

| Week | Assignment | Partner | Due Date | Submitted on | Peer Evaluation Completed on |
|------|-----------|---------|----------|--------------|------------------------------|
| 1 | 1_Shapes | Jerry Seinfield | 9/30 | 9/30 11:30pm | 10/2 8:30pm |
| 2 | 2_Colors | Harry Moler | 10/8 | 10/6 2:45pm | 10/9 9:15am |
| 3 | 3_Design | Petunia June | 10/16 | 10/17 9:00am | 10/14 3:47pm |
| 4 | 4_Coins | Choose Partner | 10/23 | Submit | Take Evaluation |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |

## Lab Assignments(TA/Instructor View)

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Home > Lab Assignments

## Lab Assignments & Peer Evaluations

The graphs below show the data of the class as a whole.

Submitting Assignments
# of students
Lab Assignment Name

Submitting Peer Evaluations
# of students
Lab Assignment Name

Search the name of the student to see a detailed history of their lab assignments and peer evaluations.

Ashley Aker    Submit

| Name | Student ID | Lab Assignment History | Peer Evaluation Records |
|------|-----------|------------------------|-------------------------|
| Ashley Aker | 1111111 | View | View |

**Student View:** For students, they will be able to view/submit assignments, view their due dates, select a partner, and take an evaluation. Clicking on the assignment links will open a new tab that gives them a pdf of the lab assignment description and requirements. "Choose Partner" and "Take Evaluation" will take them to an online tool where they will be able to select partners and take evaluations. When they want to submit their lab assignment, they can click "Submit" and it will open a new tab that will direct them to checkmate.ics.uci.edu.

**Questions answered:**
Have I submitted my lab partner evaluation form each week?
Have I (or has my partner) submitted each lab assignment?

**TA/Instructor View**: This page will allow TAs and instructors to view the class stats as a whole or search for a particular student's lab assignments and peer evaluation records. The bar graphs would be a grouped bar chart with 3 bars per lab assignment. Each bar would represent when the students submitted the assignment/evaluations (Early, On-time, or late). I was unable to change the number of bars using Balsamiq, but there would be 3 bars instead of 2 bars per assignment. They would type a student's name in the search bar provided, and a table will appear with student's matching that name. To view Lab assignment history, they would click "view" under that heading and same goes for peer evaluation records.

**Questions answered:**
When do students submit their assignments and peer evaluations?

**Lab Assignments>Lab Assignment History(TA/Instructor View)**

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Home › Lab Assignments › Lab Assignment History › Ashley Aker

## Lab Assignment History: Ashley Aker

| Assignment Name | Partner Name | Submitted by(Name) | Submitted on(Date) |
|---|---|---|---|
| 1_Shapes | Coraline Smitty | Coraline Smitty | 9/28 11:54pm |
| 2_Colors | Ron Burger | Ashley Aker | 10/7 1:29am |
| 3_Design | Kit Merry | Ashley Aker | 10/15 2:33pm |
| 4_Coins | Kit Merry | | |

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**Lab Assignment > Peer Evaluation Records(TA/Instructor View)**

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Home › Lab Assignments › Peer Evaluation Records › Ashley Aker

## Peer Evaluation Record: Ashley Aker

| Assignment Name | Partner Name | Evaluation Score Recieved | Evaluation Score Given | Submitted on |
|---|---|---|---|---|
| 1_Shapes | Coraline Smitty | 9/10 | 8/10 | 9/29 1:20am |
| 2_Colors | Ron Burger | 9/10 | 8/10 | 10/7 1:20am |
| 3_Design | Kit Merry | 9/10 | 8/10 | 10/14 1:20am |
| 4_Coins | Kit Merry | 9/10 | 9/10 | 10/23 1:20am |

---

**Lab Assignment History:** This page is to see the lab assignment history of this particular student. It shows the assignment name, their partner's name, who submitted it, and when they submitted it. By looking at the submission date/time, TAs and instructors will be able to know if this student turned it in on time or not. Also, they will know if the student has had a duplicated partner, as shown by the same name highlighted in red. I used red because in the "Color" lecture, Professor Olson mentioned color syntax and how red usually is a sign that something is wrong or not good and if a student has a duplicate partner, they are not following the class policy about duplicate partners.

**Questions Answered:**
Are students choosing partners according to policy?

**Peer Evaluation History:** This page is to see the evaluation records for this particular student. You will be able to see what evaluation scores they have been receiving as well as evaluation scores they have given to their partners. You will also be able to see the timestamp of when they submitted their evaluation score. The user has the option to sort the evaluation scores from highest to lowest or vice versa. This will allow the user to see if there are any trends in the evaluations given to this particular student.

**Questions Answered:**
Have students submitted their weekly lab partner evaluations? Are there any hot-spots of poorly evaluated lab partners over time, or evaluators who are consistently tough?

# Quizzes/Surveys(Student View)

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Home › Quizzes/Surveys

## Weekly Quizzes

The quizzes will close at 11:55pm on the day that it is due. For example, if the due date is 9/30, then you have until 11:55pm on 9/30 to submit your quiz.

| Quiz | Due Date | Submitted on |
|---|---|---|
| 1 | 9/30 | 9/28 4:30pm |
| 2 | 10/8 | 10/7 4:30pm |
| 3 | 10/16 | 10/15 4:30pm |
| 4 | 10/23 | 10/22 4:20pm |
| 5 | 10/30 | Quiz Closed, Not Submitted |
| 6 | 11/7 | Take Quiz |
| 7 | 11/14 | Take Quiz |
| 8 | 11/21 | Take Quiz |
| 9 | 12/3 | Take Quiz |

## Surveys

These surveys are optional, but we encourage you complete them because we value your insights and opinions!

| Survey Description | Due Date | Completed on |
|---|---|---|
| About You: We want to know more about you | 10/8 | 10/6 3:09pm |
| Course Evaluation: Your personal evaluation about the ICS 31 | 12/8 | Take Survey |

# Quizzes/Surveys(Instructor View)

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Home › Quizzes/Surveys

## Weekly Quizzes

The graph below indicates how many students submitted their quizzes early, on-time, or late(did not submit).

Timeliness of Quiz Submissions

# of students

Quiz #

## Surveys

You can view the results from the surveys

| Survey Description | Due Date | Action |
|---|---|---|
| About You: We want to know more about you | 10/8 | View Results |
| Course Evaluation: Your personal evaluation about the ICS 31 | 12/8 | View Results |

**Quizzes(Student View):** Students will be able to check the due dates of each quiz and when they were submitted. If they still need to take a quiz, there will either be a link that reads "Take quiz" that will open a new tab where quizzes are administered, or if the due date has already passed, "Quiz Closed, Not submitted" will be displayed indicating the student that they did not submit the quiz and are unable to submit it. As previously mentioned, the color red was used to indicate to the student that the statement represents something bad. The user will also be able to see if they completed surveys.
**Questions Answered:**
Have I submitted each on-line weekly quiz?

**Quizzes(Instructor/TA View):** Instructors will be able to view the how many students either submit quizzes early, on-time, or late/do not submit them at all. This page will also allow users to view results of the surveys administered by clicking "View Results". I placed the explanation of the graph right above because in Ware's chapter 9, a guideline was to "place explanatory text as close as possible to the related parts of the diagram"(Ware, 333)
**Questions Answered:**
Are the students completing their weekly on-line quiz(early, on time, late)?

**Course Information(Student/TA View)**

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Home > Course Information

## Course Information

Course Name: ICS 31 Introduction to Programming
Meeting Times: Tuesday and Thursday 10:00am-11:15am
Course Documents: syllabus2016.pdf
calendar2016.pdf (Subject to change)

| Title | Name | Email | Phone | Office Hours |
|---|---|---|---|---|
| Professor | Paul Programming | ppro@uci.edu | (714)555-5555 | Email for meeting |
| TA | Larry June | ljune@uci.edu | | Tues/Thursday 12:30pm-1:30pm DBH 3100 |
| TA | Carrie Lovely | clove@uci.edu | | Email for meeting |
| TA | Joseph Nordy | jnord@uci.edu | | Mon/Wed 9am-11am DBH 3100 |

**Course Info(Student/TA):** I decided to add a course information page because it always is nice to have a place where you can view all the course information without having to leave the website. When the user clicks on either course document, a new tab will open displaying the document.

**Course Information(Instructor View)**



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Home › Course Information

**Course Information**

Course Name: ICS 31 Introduction to Programming
Meeting Times: Tuesday and Thursday 10:00am-11:15am
Course Documents: syllabus2016.pdf ✎
                      calendar2016.pdf ✎

## TAs

This section is to see the assignments each TA has graded. When entering the record/gradebook, you will be able to see what the TA has graded and when they completed grading. You can also see the average score given for assignments and the number of days it took to complete grading since the day of the deadline.

| Name | Email | Course History |
|------|-------|----------------|
| Larry June | ljune@uci.edu | View Record/Gradebook |
| Carrie Lovely | clove@uci.edu | View Record/Gradebook |
| Joseph Nordy | jnord@uci.edu | View Record/Gradebook |

## Students

This section is to see all the activity that each student has done throughout the course. It will showcase all their grades for their assignments, midterms, and final as well as their peer evaluation scores, quizzes, and surveys.
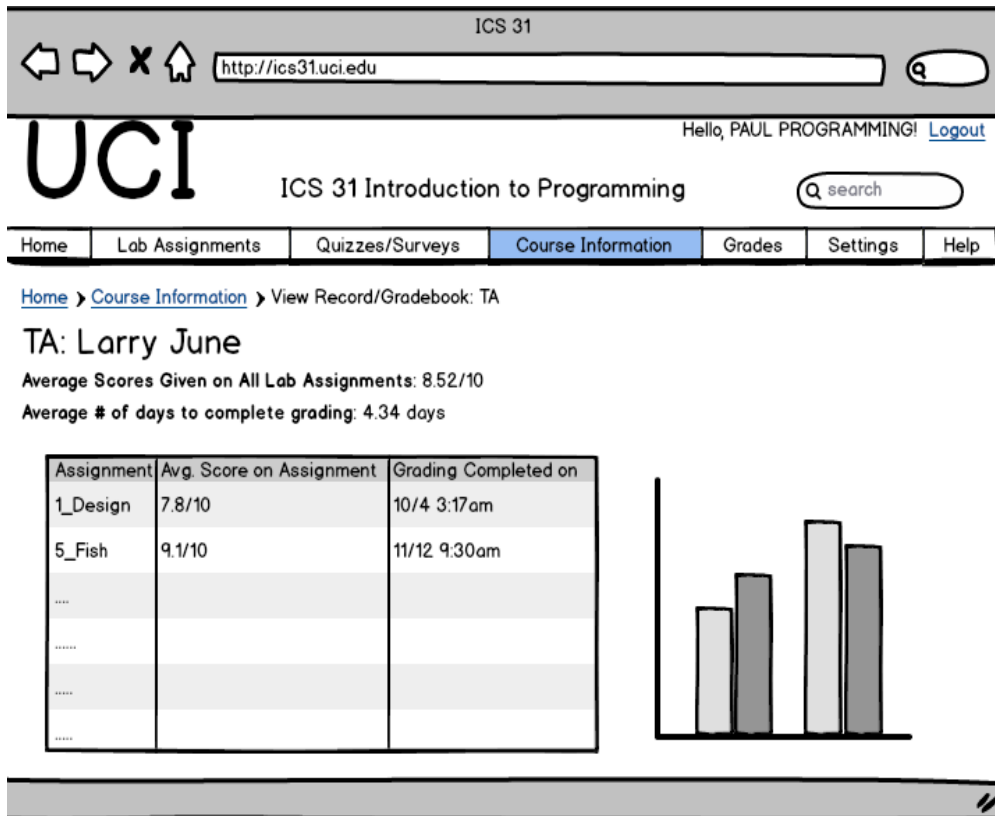
Search Student

| Student Name | Student ID | Email | Course History |
|--------------|-----------|-------|----------------|
| Ashley Aker | 1111111 | asha@uci.edu | View Record/Gradebook |
| Peter Anteater | 123 | pant@uci.edu | View Record/Gradebook |
| Petunia June | 1232412 | pjune@uci.edu | View Record/Gradebook |
| Mary Lane | 232442 | mlane@uci.edu | View Record/Gradebook |
| ...... | | | |

**Course Info(Instructor)**

This page will allow the instructor to click through all the records/gradebook for students as well as TAs. They can also update course documents at the top of the page by clicking the pencil next to each PDF. I decided to use these icons because in a lot of applications today, when you want to edit something, there will be a pencil next to it or a pen in a square. In the "Objects" lecture, Professor Olson gave us several examples of icons and told us how critical they are in today's GUIs. He mentioned how we have to be careful because icons can mean different things in different cultures. Since it is a large course, I added a search feature where instructors can search for specific students.

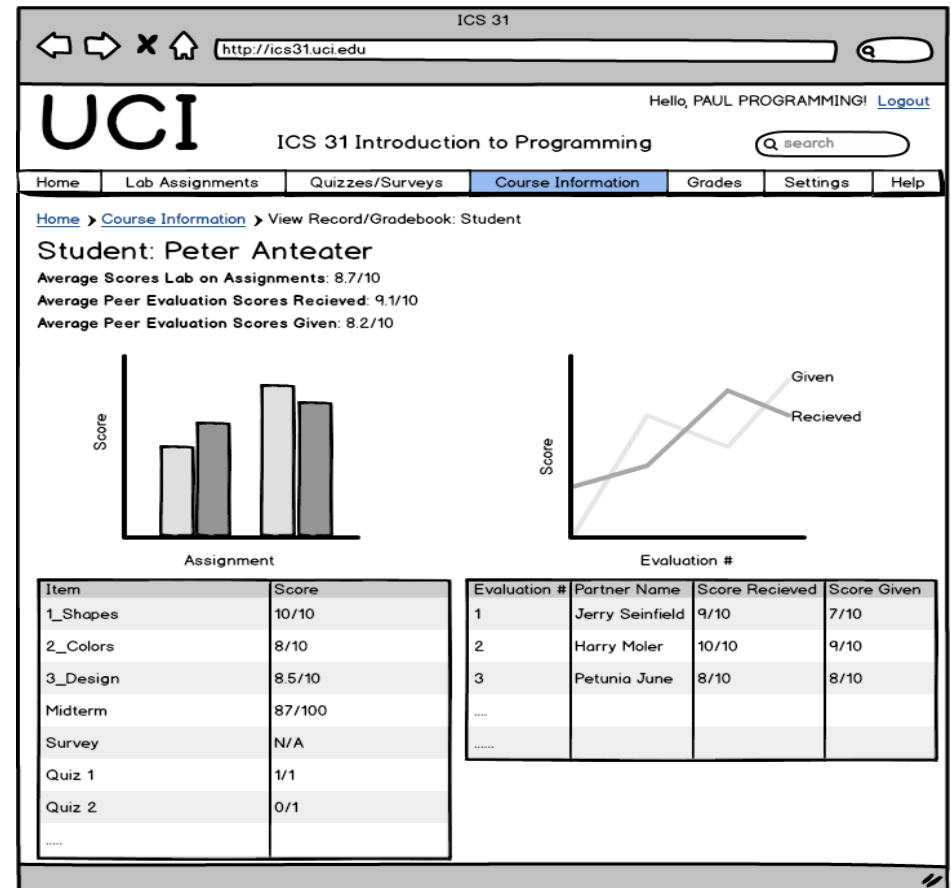## Course Information > View Record/Gradebook for TA (Instructor View)



**TA Record/Gradebook:** If the instructor clicked on "View Record/Gradebook" for a specific TA, it would lead to this page. The page would display the average scores given for all lab assignments and the average # of days it took to complete grading. In the table, it would list the assignments that the TA graded as well as the average score for each assignment and when the grading was completed. The graph to the right would show a visualization of the table on the left. The x axis would be the name of the assignment and the y axis would be numbered 1-10. It would be a grouped bar chart and the left bar would represent the average score for that assignment and the right bar would represent the number of days it took to complete grading of the assignment.

**Questions Answered:**
Are the TAs grading and returning assignments in a timely way?
Are the TAs scores reasonably distributed? Who's the toughest and easiest grader?

## Course Information > View Record/Gradebook for Student (Instructor View)



**Student Record/Gradebook:** If the instructor clicked on "View Record/Gradebook" for a specific student, it would lead to this page. The average scores would be displayed and graphs would visualize the data. The bar graph would not be a grouped bar graph, but a single bar graph. It would help the instructor see how the student has been doing on assignments visually.

**Questions Answered:**
Click through to students record/gradebook
Correlations to anything

**Grades(Student View)**

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Home > Grades

## Grades

If you have an questions about your grades, please email the TA that graded your assignment before emailing your professor.

**Lab Assignments**

| Lab Assignment | Grade | Comments | Graded By | Grade Posted on |
|---|---|---|---|---|
| 1_Shapes | 10/10 A | Good work! | Larry June | 10/3 8:19pm |
| 2_Colors | 8/10 B | You forgot to add yellow as a color. | Joseph Nordy | 10/13 3:45am |
| 3_Design | 8.5/10 B | Forgot to add your explanation for choosing this design. | Carrie Lovely | 10/22 12:39pm |

**Midterms/Final**

| Test | Grade | Grade Posted on |
|---|---|---|
| Midterm 1 | 87/100 | 10/12 4:12pm |
| Midterm 2 | | |
| Final | | |

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**Grades(Instructor/TA)**

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## Grades

**Lab Assignments**

| Lab Assignment | Graded by | Average Score |
|---|---|---|
| 1_Shapes | Larry June | 7.87/10 |
| 2_Colors | Carrie Lovely | 8.45/10 |
| 3_Design | Joesph Nordy | 8.92/10 |
| .... | | |

**Midterms/Final**

| Test | Graded by | Average Score |
|---|---|---|
| Midterm 1 | All | 75.6/100 |
| Midterm 2 | | |
| Final | | |

---

**Grades(Student View):** For students who want to look at their grades, they will simply need to click the "Grades" tab in the menu bar. They will be able to see the who graded their assignment, comments from the grader, and when the grade was posted.

**Questions Answered:**
Are the correct scores recorded for my lab assignments, midterms?

**Grades(TA/Instructor View):** If instructors want an at a glance visualization about the grades recorded for the course, they can visit the grades page and see the lab assignments and who graded them, the average score on the assignments, and the average score on the midterms/final.

**Questions Answered:**
Who's the toughest and easier grader?