

# COEN 163L

Week 8 – 2:15 section

## Schedule

- 2:15-2:30 – lab 5/6  
questions/demo time while  
everybody arrives
- 2:30 – introduce lab 7
- Work time – lab/assignment  
work, demos, etc.

---

# COEN 163L

Week 8 – 5:15 section

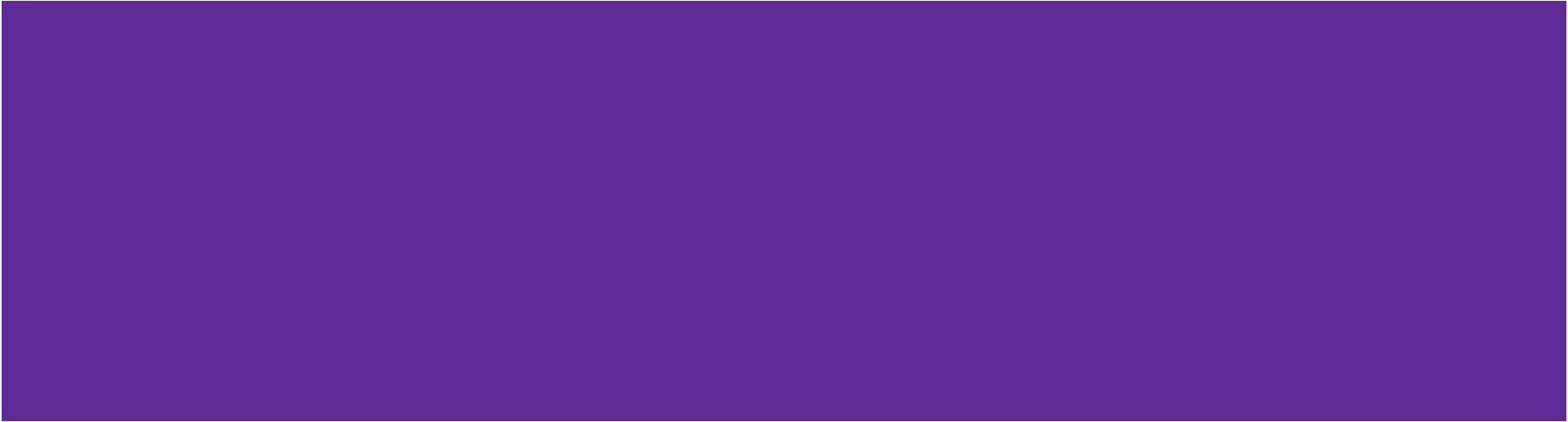
## Schedule

- 5:15-5:30 – lab 5/6  
questions/demo time while  
everybody arrives
- 5:30 – introduce lab 7
- Work time – lab/assignment  
work, demos, etc.

---

# COEN 163L

## Lab 7 – Heuristic Evaluation



# Lab 7 Tasks

Refer to [Nielsen's 10 Heuristics](#)

Follow the heuristics evaluation procedure (5 steps) to evaluate your final project prototype.

## Submission

- Individual – individual evaluation tables
- Group – aggregated evaluation tables and UARs
- No demo!

# Nielsen's 10 Usability Heuristics



Visibility of  
System Status

1



Match Between  
System & Real World

2



User Control  
And Freedom

3



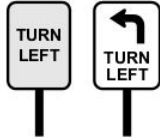
Consistency  
And Standards

4



Error  
Prevention

5



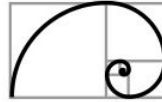
Recognition  
Rather Than Recall

6



Flexibility And  
Efficiency of Use

7



Aesthetic And  
Minimalistic Design

8



Help Users  
With Errors

9



Help And  
Documentation

10

Resources: [Class slides](#), [Nielsen Norman Group](#)

# Heuristics Evaluation Procedure

1. Brief the group
2. Evaluate individually
3. Aggregate issues
4. Apply severity ratings
5. Summarize findings

# 1. Brief the group

- Domain briefing
  - Important if evaluators are unfamiliar with the product's domain
- Scenario briefing
  - Can optionally include specific tasks or scenarios or allow evaluators to explore on their own

## 2. Evaluate individually

- Two passes
  - Inspect flow (and optional tasks/scenarios)
  - Inspect each element against heuristics

*\* Doesn't have to be all bad!*

- **Deliverable: individual evaluation table**
  - ID: <evaluator's initials>-HE-##
  - Name: succinct description
  - Heuristic: H1-10

ID	Name	Heuristic(s)
cda-HE-09	No feedback during image upload process	H1 Visibility
cda-HE-10	File size instructions use jargon	H2 Match
cda-HE-11	Upload error message provides no guidance	H9 Recovery
cda-HE-12	File navigator starts from root folder every time	H7 Flexibility
cda-HE-13	Image upload requires users specify file type	H6 Recognition

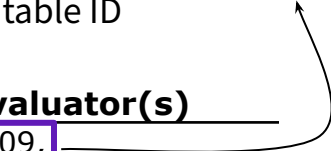


### 3. Aggregate issues

- As a group, read issues and consolidate a list
- Deliverable: aggregated evaluation table**

ID	Combined name	Heuristic(s)	Evaluator(s)
HE-12	No feedback during image upload process	H1 Visibility	cda-HE-09, ljd-HE-02, ht-HE-04
HE-13	OK and Apply button perform same action	H4 Consistency	ljd-HE-03, sh-HE-11
HE-14	New entries appear above viewable area, user must manually scroll to see them	H1 Visibility	ljd-HE-06, sh-HE-02, ht-HE-04
HE-15	Email addresses must be added manually from memory	H5 Error prevention, H6 Recognition	ljd-HE-07, cda-HE-04, ht-HE-01

Individual evaluation table ID



## 4. Apply severity ratings

- Individually rank severity for each entry in your aggregated evaluation table, then average the ratings
- Justifications
  - **Frequency:** Common or rare occurrence?
  - **Impact:** How bad is it? How hard to recover?
  - **Persistence:** One-time problem users can work around or unavoidable problem?
- 4 Catastrophic
  - Product cannot be released
- 3 Major
  - High-priority issue
- 2 Minor
  - Good to fix when there's a lull
- 1 Cosmetic
  - Icing on the cake (these rarely get done)
- 0 Not a problem
  - I don't agree that this is a problem at all

## 5. Summarize findings

- **Deliverable: Usability Aspect Reports**
- Elements
  - ID: “HE-##”
  - Name: succinct description
  - Evidence: just the facts
  - Explanation: which heuristic violated, your interpretation of the evidence
  - Severity: rating and justification
  - Solution:(optional) include possible fixes
  - Relationships:(optional) link to related reports

ID and Name from aggregated table (step 3)

Example:

**ID:** “HE-12”

**Name:** No feedback during image upload process

**Evidence:** When you click upload to upload an image, there is no response in the interface until you see the image is uploaded. Uploading took 10 seconds.

**Explanation:** Violates Visibility because the system status was unclear during image uploading.

**Severity:** 3 (Frequent, persistent, and medium impact)

**Solution:** Use a progress bar or some other indication of image uploading.

**Relationships:** N/A

From step 4