Introduction

EECS 211
Winter 2017
Who am I? Where is the professor?

- I am a Head TA, Shu-Hung You

The professor sends his regrets; he couldn't be here but will return next week.
Who am I? Where is the professor?

- I am a Head TA, Shu-Hung You
- The professor sends his regrets; he couldn’t be here but will return next week
Road map

- What’s it all about?
- Topics
- Policies
- Academic honesty
- How to get help
What EECS 211 is all about

From the course abstract:
What EECS 211 is all about

From the course abstract:

- **EECS 211 teaches foundational software design skills at a small-to-medium scale.**
What EECS 211 is all about

From the course abstract:

- **EECS 211 teaches foundational software design skills at a small-to-medium scale.** We will grow from writing single functions to writing interacting systems of several components.
What EECS 211 is all about

From the course abstract:

● EECS 211 teaches foundational software design skills at a small-to-medium scale. We will grow from writing single functions to writing interacting systems of several components.

● We aim to provide a bridge from the student-oriented HtDP curriculum
What EECS 211 is all about

From the course abstract:

- **EECS 211 teaches foundational software design skills at a small-to-medium scale.** We will grow from writing single functions to writing interacting systems of several components.
- **We aim to provide a bridge from the student-oriented HtDP curriculum (that is, EECS 111)**
What EECS 211 is all about

From the course abstract:

- **EECS 211 teaches foundational software design skills at a small-to-medium scale.** We will grow from writing single functions to writing interacting systems of several components.

- **We aim to provide a bridge from the student-oriented HtDP curriculum (that is, EECS 111) to real, industry-standard languages and tools.**
What EECS 211 is all about

From the course abstract:

- **EECS 211 teaches foundational software design skills at a small-to-medium scale.** We will grow from writing single functions to writing interacting systems of several components.

- **We aim to provide a bridge from the student-oriented HtDP curriculum (that is, EECS 111) to real, industry-standard languages and tools.** Like C++14 and CLion.
What EECS 211 is all about

From the course abstract:

- **EECS 211 teaches foundational software design skills at a small-to-medium scale.** We will grow from writing single functions to writing interacting systems of several components.

- **We aim to provide a bridge from the student-oriented HtDP curriculum (that is, EECS 111) to real, industry-standard languages and tools.** Like C++14 and CLion.

- **Our language will be C++, which provides abstraction mechanisms such as classes and templates that we use to express our design ideas.**
What EECS 211 is all about

From the course abstract:

- **EECS 211 teaches foundational software design skills at a small-to-medium scale.** We will grow from writing single functions to writing interacting systems of several components.
- **We aim to provide a bridge from the student-oriented HtDP curriculum (that is, EECS 111) to real, industry-standard languages and tools.** Like C++14 and CLion.
- **Our language will be C++, which provides abstraction mechanisms such as classes and templates that we use to express our design ideas.** We’ll learn how to define our own, new types that act like the built-in ones.
What EECS 211 is all about

From the course abstract:

- **EECS 211 teaches foundational software design skills at a small-to-medium scale.** We will grow from writing single functions to writing interacting systems of several components.
- **We aim to provide a bridge from the student-oriented HtDP curriculum (that is, EECS 111) to real, industry-standard languages and tools.** Like C++14 and CLion.
- **Our language will be C++, which provides abstraction mechanisms such as classes and templates that we use to express our design ideas.** We’ll learn how to define our own, new types that act like the built-in ones.
- Topics include…
Topics

• Language basics
Topics

- Language basics: expressions, statements, variables, types, assignment, control structures, functions
Topics

- Language basics: expressions, statements, variables, types, assignment, control structures, functions
- Testing
Topics

- Language basics: expressions, statements, variables, types, assignment, control structures, functions
- Testing: how we know software works
Topics

- Language basics: expressions, statements, variables, types, assignment, control structures, functions
- Testing: how we know software works
- Structuring data
Topics

- Language basics: expressions, statements, variables, types, assignment, control structures, functions
- Testing: how we know software works
- Structuring data: structs and vectors
Topics

- Language basics: expressions, statements, variables, types, assignment, control structures, functions
- Testing: how we know software works
- Structuring data: structs and vectors
- The stack and the heap
Topics

- Language basics: expressions, statements, variables, types, assignment, control structures, functions
- Testing: how we know software works
- Structuring data: structs and vectors
- The stack and the heap: how data is laid out and managed in memory
Topics

- Language basics: expressions, statements, variables, types, assignment, control structures, functions
- Testing: how we know software works
- Structuring data: structs and vectors
- The stack and the heap: how data is laid out and managed in memory
- Data abstraction
• Language basics: expressions, statements, variables, types, assignment, control structures, functions
• Testing: how we know software works
• Structuring data: structs and vectors
• The stack and the heap: how data is laid out and managed in memory
• Data abstraction: using classes to define our own types
Policies

- There will be a homework assignment every week

Late work will not be accepted

Counts for 70% of your grade

Two exams
- Thursday, February 9
- Thursday, March 9

Each worth 15% of your grade

Mapping of point totals to letter grades is at instructor's discretion
Policies

- There will be a homework assignment every week
  - Most will be pair-programmed with an assigned partner
- Two exams
  - Thursday, February 9
  - Thursday, March 9
  - Each worth 15% of your grade
- Mapping of point totals to letter grades is at instructor’s discretion
Policies

- There will be a homework assignment every week
  - Most will be pair-programmed with an assigned partner
  - Late work will not be accepted
Policies

● There will be a homework assignment every week
  ▶ Most will be pair-programmed with an assigned partner
  ▶ Late work will not be accepted
  ▶ Counts for 70% of your grade
Policies

- There will be a homework assignment every week
  - Most will be pair-programmed with an assigned partner
  - Late work will not be accepted
  - Counts for 70% of your grade

- Two exams
Policies

● There will be a homework assignment every week
  ▶ Most will be pair-programmed with an assigned partner
  ▶ Late work will not be accepted
  ▶ Counts for 70% of your grade

● Two exams
  ▶ Thursday, February 9
  ▶ Thursday, March 9
Policies

- There will be a homework assignment every week
  - Most will be pair-programmed with an assigned partner
  - Late work will not be accepted
  - Counts for 70% of your grade

- Two exams
  - Thursday, February 9
  - Thursday, March 9
  - Each worth 15% of your grade
Policies

- There will be a homework assignment every week
  - Most will be pair-programmed with an assigned partner
  - Late work will not be accepted
  - Counts for 70% of your grade

- Two exams
  - Thursday, February 9
  - Thursday, March 9
  - Each worth 15% of your grade

- Mapping of point totals to letter grades is at instructor’s discretion
Academic honesty

In EECS 211, we take cheating very seriously.

- Receive help of any kind on an exam (except from authorized course staff)
- Give help of any kind on an exam
- Share (give or receive) homework code with anyone who is not your official partner
- Obtain code from an outside resource, such as Stack Overflow

Please don’t do these things
- If you don’t write code, you won’t learn; struggle is good
- All cheating will be reported to the relevant dean for investigation

If unsure about your particular situation, ask the instructor or other course staff
Academic honesty

In EECS 211, we take cheating very seriously.

- Cheating is when you:
  - Receive help of any kind on an exam (except from authorized course staff)
  - Give help of any kind on an exam
  - Share (give or receive) homework code with anyone who is not your official partner
  - Obtain code from an outside resource, such as Stack Overflow

Please don't do these things
  - If you don't write code, you won't learn; struggle is good
  - All cheating will be reported to the relevant dean for investigation

If unsure about your particular situation, ask the instructor or other course staff
Academic honesty

In EECS 211, we take cheating very seriously.

- Cheating is when you:
  - Receive help of any kind on an exam (except from authorized course staff)
Academic honesty

In EECS 211, we take cheating very seriously.

- Cheating is when you:
  - Receive help of any kind on an exam (except from authorized course staff)
  - Give help of any kind on an exam

If unsure about your particular situation, ask the instructor or other course staff.
Academic honesty

In EECS 211, we take cheating very seriously.

- Cheating is when you:
  - Receive help of any kind on an exam (except from authorized course staff)
  - Give help of any kind on an exam
  - Share (give or receive) homework code with anyone who is not your official partner

Please don’t do these things
- If you don’t write code, you won’t learn; struggle is good
- All cheating will be reported to the relevant dean for investigation

If unsure about your particular situation, ask the instructor or other course staff
Academic honesty

In EECS 211, we take cheating very seriously.

- Cheating is when you:
  - Receive help of any kind on an exam (except from authorized course staff)
  - Give help of any kind on an exam
  - Share (give or receive) homework code with anyone who is not your official partner
  - Obtain code from an outside resource, such as Stack Overflow

Please don't do these things
- If you don't write code, you won't learn; struggle is good
- All cheating will be reported to the relevant dean for investigation

If unsure about your particular situation, ask the instructor or other course staff
Academic honesty

In EECS 211, we take cheating very seriously.

● Cheating is when you:
  ▶ Receive help of any kind on an exam (except from authorized course staff)
  ▶ Give help of any kind on an exam
  ▶ Share (give or receive) homework code with anyone who is not your official partner
  ▶ Obtain code from an outside resource, such as Stack Overflow

● Please don’t do these things
Academic honesty

In EECS 211, we take cheating very seriously.

- Cheating is when you:
  - Receive help of any kind on an exam (except from authorized course staff)
  - Give help of any kind on an exam
  - Share (give or receive) homework code with anyone who is not your official partner
  - Obtain code from an outside resource, such as Stack Overflow

- Please don’t do these things
  - If you don’t write code, you won’t learn; struggle is good
Academic honesty

In EECS 211, we take cheating very seriously.

- **Cheating is when you:**
  - Receive help of any kind on an exam (except from authorized course staff)
  - Give help of any kind on an exam
  - Share (give or receive) homework code with anyone who is not your official partner
  - Obtain code from an outside resource, such as Stack Overflow

- **Please don’t do these things**
  - If you don’t write code, you won’t learn; struggle is good
  - All cheating will be reported to the relevant dean for investigation
Academic honesty

In EECS 211, we take cheating very seriously.

- **Cheating is when you:**
  - Receive help of any kind on an exam (except from authorized course staff)
  - Give help of any kind on an exam
  - Share (give or receive) homework code with anyone who is not your official partner
  - Obtain code from an outside resource, such as Stack Overflow

- **Please don’t do these things**
  - If you don’t write code, you won’t learn; struggle is good
  - All cheating will be reported to the relevant dean for investigation

- If unsure about your particular situation, ask the instructor or other course staff
Getting help

- **In person.** Your course staff has office hours:
  
  Instructor: Jesse Tov
Getting help

- **In person.** Your course staff has office hours:
  - Instructor: Jesse Tov
  - Head TAs: Shu-Hung You, Majed Valad Beigi

- **Online.** Ask questions on Piazza:
  - [https://piazza.com/northwestern/winter2017/eecs211](https://piazza.com/northwestern/winter2017/eecs211)
Getting help

- **In person.** Your course staff has office hours:
  - Instructor: Jesse Tov
  - Head TAs: Shu-Hung You, Majed Valad Beigi

Online. Ask questions on Piazza: https://piazza.com/northwestern/winter2017/eecs211
Getting help

- **In person.** Your course staff has office hours:
  
  Instructor:  Jesse Tov  
  Head TAs:  Shu-Hung You, Majed Valad Beigi  

  Times and locations and will be listed on the course webpage:

  [webpage link]
Getting help

- **In person.** Your course staff has office hours:
  
  Instructor:  Jesse Tov
  Head TAs:    Shu-Hung You, Majed Valad Beigi
  Peer TAs:   Vyas Alwar, Matt Cheung, Wyatt Cook,
              Nathan Lindquist, Sophia Lou, Matthew
              Niemer, Chankyu Oh, Nneoma Oradiegwu,
              Cem Ozer, Scott Renshaw, Joe Severini,
              James Whang

  Times and locations and will be listed on the course web page:
  
  http://users.eecs.northwestern.edu/~jesse/course/eecs211/

- **Online.** Ask questions on Piazza:
  
  https://piazza.com/northwestern/winter2017/eecs211