Final Projects

Sketchy, Pacman, Othello & Indy

What are the CS15 final projects?

- Final chance to show off and develop your Object-Oriented Programming skills with a large individual program
- 25% of your final grade
- Like all other projects, you must meet Minimum Functionality on the Final Project to pass the course
Logistics

- All final projects will be completed individually
- There are 4 Final Project options for you to choose from
- We've divided our TA staff among the projects; each project will have their own TA hours schedule
- Starting early is CRUCIAL! The average student reports ~40-50 hours
- You cannot use late days on this assignment; if you submit past the on-time handin, you will get an 8% deduction

Timeline

- Today, November 16th: FPs released
- Saturday, November 18th @ 1PM ET: Virtual FP Help Sessions
- Saturday, November 18th @ 11:59PM ET: FP Declaration Form due
- Sunday, December 3rd @ 10:00PM ET: Code checkpoint due
  - Must come to Conceptual Hours to be checked off for your FP-specific code checkpoint
- Sunday, December 10th @ 11:59PM ET: Early handin deadline
- Tuesday, December 12th @ 11:59PM ET: On-time handin deadline
- Thursday, December 14th @ 5PM ET: Late handin deadline
  - The late deadline should only be used if you need to meet MF. You'll lose 8% of your grade if you submit on the late deadline, you may NOT use late days for the final project
  - If you haven't submitted anything by 5PM on Dec 14th, you'll NC the course

Final Project Options

- Sketchy — Graphical editing program
- Othello — Human and AI Othello board game simulation
- Pacman — Classic Pacman arcade game
- Indy — DIY Final Project
“Dumping on other projects is key. They have to be vicious.” -avd

Let the roasts commence!
VISA-core

Couldn’t get in?  make it yourself!
Missing MS paint? make it yourself!
RISD degree? make it yourself!

Unleash your inner artist!
Adobe Photoshop
$263.86
sketchy
Why Sketchy?

Easy! to test!

You want to waste time learning how to PLAY?

Tetris got you down?

ArrayIndexOutOfBoundsExceptions?

We have the solution for you!

You never have to use 2D Arrays again. EVER.*

*We can't actually guarantee that you'll never use them again in your life. Sorry.
Emma Watson would’ve done Sketchy

Why Sketchy?

It’s Andy’s Favorite FP!

source: Man invented computer graphics, you’re saying he won’t love painting with a computer?

The Made in Sketchy Gallery 🎨
Unique bugs!

👎 Indy?

The "I'm not like other girls" fp

Project proposal? cs 15 is not a writ babes <

Tryhards do indy… are you a sweat?

It's giving "it's me, hi, I'm the problem"

🤢 Pacman?

Vomits? 2d arrays? You still on that? booo

BFS?? more like BarF Sounds…it's not even real AI 🙃

Ghosts? Halloween was last month - past tense
Where's the originality? The creativity?
Some other info...

💖 💘 💝❤️🔥💞

I hate to bring it up, but...

COINCIDENCE ISN'T REAL

Othello: It's a real tragedy😔

Visual Hole. 4th gen flop. No slay
Othello: It's a real tragedy 😔

Mississippi Floods

"At least I can still play Othello" - nobody

Demo
Some info

- Othello is a two-player strategy board game also known as Reversi
- Create your own multi-level Artificial Intelligence (AI) player that can play a human player or another AI
- Can play the game with oreos

Roast
Most STACKED TA Staff!!!!

Creator of GPTA
(he learned AI from Othello!!!)

Former cartoon winners

Answers all your ed questions

SKETCHY 😃
<table>
<thead>
<tr>
<th>SKETCHY 😄</th>
<th>OTHELLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Laughable</td>
<td></td>
</tr>
<tr>
<td>- bffr</td>
<td></td>
</tr>
<tr>
<td>- Cool</td>
<td></td>
</tr>
<tr>
<td>- Not ugly</td>
<td></td>
</tr>
<tr>
<td>- Imagine showing your friends back home AI you programmed - vs imagine showing them Sketchy 😂</td>
<td></td>
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</tbody>
</table>

**PACMAN 🤢**

**BORING**
Mom, can we have Pacman?

No, there is Pacman at home.

Pacman

That debugging line…
- Ugly
- Lame
- Boring
- BFS (fake AI)

Hates Andy 😱❤️

Pacman Kids Coding

Othello

You’ll be home before the queue ends
- Sexy
- Fun
- Highest grade avg 😱🔥
- Real AI

Loves Andy 😊❤️
imagine

3: INDY 😏

INDY STUDENTS EXPLAINING THEIR PROJECT

The indy tas over thanksgiving break, 2022
Gavin pondering his life choices after choosing Indy

Anastasio searching for Indy TAs

<table>
<thead>
<tr>
<th>Indy 😊</th>
<th>OTHELLO 😊</th>
</tr>
</thead>
<tbody>
<tr>
<td>- That project proposal... 😆</td>
<td></td>
</tr>
<tr>
<td>- hard</td>
<td></td>
</tr>
<tr>
<td>- Why would you do this</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- NO PROJECT PROPOSAL</td>
</tr>
<tr>
<td></td>
<td>- LESS THINKING</td>
</tr>
<tr>
<td></td>
<td>- WILL NOT MAKE YOUR LIFE HELL (PROBABLY)</td>
</tr>
<tr>
<td></td>
<td>- MORE FUN</td>
</tr>
<tr>
<td></td>
<td>- IT'S LIT 😎</td>
</tr>
<tr>
<td>Project</td>
<td>Votes</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>Othello</td>
<td>83.5%</td>
</tr>
<tr>
<td>Sketchy</td>
<td>11.0%</td>
</tr>
<tr>
<td>Indy</td>
<td>4.5%</td>
</tr>
<tr>
<td>Pacman</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Which CS15 final project has the hottest and coolest TAs?

CONCLUSION:
HOT PEOPLE DO OTHELLO
Some Info

- Super rad arcade game
- Write an AI for the Ghosts by implementing a Breadth-First Search algorithm
- Play against said ghosts as you “test your game”
- Opportunities for fun extra credit like fruit and extra levels

RADICAL!

SO MUCH FUN!
Brown Trivia 69: The Pax in CPax stands for Christina Paxman in honor of her favorite CS15 final project.

Top Reasons to Do Pacman
We Got Adam

Has most ed answers out of any (former) HTA!

You get to spend time with Adam - the only TA with a Morgan Stanley Vest ;)))

We Have 2/3 STAs
(stands for smartest TAs!)

Source: 2021 skits

...and all the other Sexiest TAs

[Text snippets with various text and images]
Look at this duo
And Ilan with over 100 ed answers

Pacman is actually relevant
Proof that no one cares about the other projects
Look at the Pacman stats though :))

Pacman is superior to Othello
Even the TAs hate Othello.
Othello TAs trying to rebrand it as "cookie mayhem" to make it sound less boring
11/18/2023

Othello TAs are dirty

Cannon doesn’t even wash his hair…

Also rumor has it Cannon doesn’t believe in washing his hands/using hand sanitizer…?

Othello TAs are all try-hards

Grant literally replies to ALL of his own ed posts

Grant and Sarah R pressure their students?? NEVER okay.
Does anyone even know how to play Othello??

(4/5) Pacman is superior to Sketchy
Sketchy is all about pretty pictures so we took some relevant screenshots:

The Sketchy handout is 26 pages... Pacman is a respectable 19 <3
TV in Page-Rob telling you not to open any emails from Sketchy

What's Sarah's (Sketchy HRA) biggest weakness?
Gmail or fun? We'll let you decide for yourselves

Good luck getting any help from Sketchy TAs. Doesn't look like they have email figured out yet.
Can we get an f in the chat for the minion read?
Pacman is superior to Indy

Indy? More like IntheCTalltheTime

Indy TAs are ruthless... see for yourself

Anastasio after convincing you Indy is a good idea then leaving you for the wolves (his average response time on Ed is 1.2 days)

Not to mention their god complexes

"I have little coding experience"

Indy TAs are ruthless... see for yourself

Anastasio after convincing you Indy is a good idea then leaving you for the wolves (his average response time on Ed is 1.2 days)

Not to mention their god complexes

In case you need more reasons not to do Indy...

Anastasio. Anastasio is the reason you should not do Indy.

Other girls
- perfect hair
- perfect wake up
- superficial
- always looking for male approval

Me
- doesn't smile
- prefers cookies over rings
- very wholesome
- never demanding
- I'm not like other girls
- so please don't stick me

- Did Indy as my FP

Anastasio is the reason you should not do Indy.
Indy

(feat. Anastasio, Gavin, Morgane, & David)

Some info

- You design your own project!! 😊
- Requirements:
  - Appropriate length (e.g., not Pong)
  - Uses polymorphism
  - Uses a new data structure
  - Uses an algorithm of moderate complexity (at least as complicated as Tetris’ line clearing)
  - Originality
- Possibilities are endless! ∞
Top Reasons to do Indy (a)

You don’t have to go to conceptual hours ever again

Top Reasons to do Indy (b)

1980 1883 Never made it to market

Important trends since 1980 (Pacman is released)
trend since 1883 :/ (othello dropped)

not smiling

they might be playing checkers 😬

wtf is an othello

cool shapes go brrr

more trends :

i need to pick a fp

we got gta 6 before sketchy

i will do sketchy
average sketchy student

Indy first offered in 1994

% up

all did indy cs 15 final project

Top Reasons to do Indy (c)
Top Reasons to do Indy (d)

Guaranteed MOSS score of 0%

Top Reasons to do Indy (e)

You can put Indy in your brand new computer science portfolio (its 100% yours)! 😍

typical pacman student when they need a portfolio for their TikTok internship :(  

used to be broke but dance comes with age 💯

BUT MY MONEY STILL GRR 🤫
Top Reasons to do Indy (f)

**Indy** is only one letter away from **Andy**

(and only 3 letters from daddy 😊)

Top Reasons to do Indy (g)

Okay to the girl in cs 15 who chatted with me the other day in line for hours... the fact that you’re doing indy is SO HOT. I’ll NEVER be as cool why did i ever pick Pacman 😭😭😭

I JUST GOT ACCEPTED FOR INDY AHHHHH

Ok but Indy student in the Sun Lab last night can... get it. 😥💦

TBH my biggest regret in life is not doing indy for CS 15 😩

Top Reasons to do Indy (h)

<table>
<thead>
<tr>
<th>Pacman Handout?</th>
<th>1 of 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sketchy Handout?</td>
<td>1 of 26</td>
</tr>
<tr>
<td>Othello Handout?</td>
<td>1 of 14</td>
</tr>
</tbody>
</table>

But Othello has AN EXTRA HANDOUT  

The Indy handout is only 7 pages 😊
Top Reasons to do Indy (i)

sketchy student after finally reading 26 page handout

learning the rules

othello student after finally reading 21 page handout

BFS pacman student after rewriting their tetris code to set up the board

Top Reasons to do Indy (j)

the other HTAs regret not doing indy

we have proof
Top Reasons to do Indy (k)

PacMan: maximum score is only 3,333,360 points :(  
Othello: you lose to AI💀  
Sketchy: you lost the second you picked sketchy

Logistics

Just a reminder that you do need to meet all the requirements listed in the handout to be approved to do Indy!

BUT! Don’t worry—we will help you meet the requirements if you are stuck or need to brainstorm together!

We want you to be as creative as possible while still meeting the requirements, and the Indy team is here to support!😊

Demos
Very Important Indy Information

- If you're interested in doing Indy, you should
  - Develop an initial plan for yours soon.
  - If you have any questions, you can email the Indy TAs at: aortiz18@cs.brown.edu, gdhanda@cs.brown.edu, mpizigo@cs.brown.edu, and dolaniyi@cs.brown.edu.
  - Find a "backup" Final Project that you'll do in case your project doesn't get approved.
- Send us a project proposal by THIS SATURDAY 11:59PM EDT
- Keep in mind that Indy is a much larger time commitment than the other final projects
  - You'll be responsible for creating your own program specs and design (other projects already have this planned out).
  - There's a lot of freedom in this assignment—be comfortable with the lack of structure!
- It's a lot of work, but a lot of fun!

Announcements

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Announcements (1/2)

- If you’re interested in Indy:
  - Submit your proposal to the Indy TAs using the form in the handout by Saturday at 11:59 PM.

- Everyone, regardless of which project you want to do, must fill out the FP declaration form by Saturday at 11:59 PM.
  - This form is binding. If you want to switch afterward, you must email the HTAs.

- Come to HTA hours tomorrow (Friday) 3-4 PM in CIT 210 or on Zoom if you want to talk about which Final Project to do!

Announcements (2/2)

- NO TA hours today or from Monday, November 20 to Sunday, November 27th.
- TA hours will be held from Friday, Nov 17th to Sunday, Nov 19th.
- Monday, Nov 28th after Thanksgiving break hours will resume.
  - Feel free to post on Ed over Thanksgiving break; although TA response time may be a bit slower.

- No lecture on Tuesday.
- Pick up CS15 T-shirts after lecture today.
- Have a great break!