

Absolute time totals are at the complete bottom!

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
1/27/2025 5:00PM to 7:00PM	2 hours	Other	Attended Orientation Zoom meeting	Find supervisor, Lock-in project, talk to fellow classmate about possibly doing project together
1/28/2025 11:00AM to 1:30PM	2 hours & 30 min (2.5 hours)	Research	Updated this timelog's formtting, Looked into third project idea; Wrote up provisional draft detailing vague plan, and reasons why *this* project; then realized NAMUS already did/does everything I wanted to do, meaning this entire project idea is useless and going out the window. Yay.	THINK OF NEW PROJECT IDEA Attempt to contact friend again, Shoot possible supervisors emails, go to their office hours, Setup a Github now, ahead of time?
1/30/2025 10:30AM to 12:15PM 12:45PM to 2:00PM	3 hours total	Other	Formulated and tossed more project ideas; made github, conversed with friend about ideas inbetween now and last entry	Go to Allan James's office, perhaps they can give some adive on choosing a project; and verify/unverify the ones we came up with? Shoot Prof Mcneill an email
2/1/2025 10:00AM to 11:00AM	1 hour	Other	After a day rest, realized I was being dumb; doing the Cryptography project; making it a Windows Exe now though, instead of a website; I don't know how to make exes, so, it'll be... a learning experience, which is the point, no? Also, wrote up a (very) rough draft explaining my thought-process, what the project entails, etc	EMAIL EMAIL EMAIL
2/1/2025 11:00AM to 11:30AM	0.5 hours	Supervisor Email	Sent that email to Mcneill, finally!	Rewrite rough draft into something more presentable by itself; this is a project plan! I want to be able to send-in the document flat, if/when someone asks what my project's about! Apply to the internship oppertuinites; while completing my personal project would be something I would love, regardless, a job would just be smarter Get a head-start on programming for my project!
2/1/2025 11:30AM to 2:15PM 2:45PM to 7:45PM	7.75 hours	Other	Job & Internship Applications	continue this later.

github link:

https://github.com/AHMED-OMER-Program01/CISC_4900_PROJECT-

Week reflection:

"oh god submit time is this morning I'm an idiot I don't have time to reflect I hope the info presented so far is enough; I will do my best to achieve more professional results next submission; Again, my apologies!"

The above was from when I thought I had to submit 9PM, instead of AM, the first week.

In general, the week was both anxiety inducing, and productive. I spent a majority of my time creating, and personally shooting down, project ideas, but not only did I eventually manage find a **decent** one, I snagged a great supervisor, in the form of Prof Mcneill.

On the challenges I specifically faced during this period; I realized that while I was up, down, and ready to do, pretty much anything, I didn't have a clear vision as to **what, exactly**, or, **how, exactly** to start. The Blackboard resources here were a great help; as well as were the 'previous project examples' page provided for/to us. While my own project is dissimilar to any I saw there, the **finished project example** acknowledgement on 'what can constitute as a healthy project' made me realize I was both aiming too high, AND too low. My current project, while slated to be hard personally, is a great chance to learn a **bunch** of things I've been meaning to get into!

Overall, I faced anxiety during the first steps, but now, I feel like I'm on a roll!

Er, barring that first timelog submission mistake. That was, and still is completely on me.

Regardless, the first week was in retrospect, fun! Cheers!

THIS WEEK AND IN TOTAL;	
Types of hours;	SPENT;
supervisor discussions, emails:	0.5
Team discussions, emails:	0
Design:	0
Coding:	0
Testing & Debugging:	0
Research, training, learning:	2.5
Other:	13.75
TOTAL:	16.75

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
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2/3/2025 10:50AM to 11:05AM	0.25 hours	Supervisor	Confirmed Matthew McNeill as my supervisor!	<p>Get in writing; I trust his word, but documentation is key!</p> <p>Survey + timelog + resume is due tonight! Do survey! Pretty up previous form!</p> <p>Rewrite Project description draft into a cleaner, more professional explanation</p> <p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Visit AJ's office; try to learn his office hours; and, get advise on current project idea; is it stable enough as is? If not, any reccomendations on how to expand and/or solidify it into a more presentable form? Etc?</p> <p>Get to coding!</p>
2/3/2025 12:20PM to 12:50PM	0.5 hours	Other	<p>Met AJ! Turned out, this morning, he placed an announcement this morning on blackboard; his office hours are there!</p> <p>Also; we talked on the project; and while I'm going to convert/rewrite the notes I got onto my computer via a .txt, it was overall very, very helpful! Project has more form to it, and it's also a go! Wohoo!</p>	<p>Get Professor McNeill's supervisor position in writing; I trust his word, but documentation is key!</p> <p>Survey + timelog + resume is due tonight! Do survey! Pretty up previous form!</p> <p>Rewrite Project description draft into a cleaner, more professional explanation</p> <p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Copy AJ-Meeting notes into a shortform .txt on this computer</p> <p>Get to coding!</p>

2/3/2025 1:20PM to 1:50PM	0.5 hours total	Other	<p>I thought the survey was due 9:00PM, not AM!</p> <p>While my friend was able to remind me, it was a big blunder! Plus, my internet kept reverting the survey. Ugghhh. Add in the fact I didn't get time to convert my previous timelog into a pdf-friendly format??</p> <p>I guess this simply I reminder to be more & more professional in the future!</p>	<p>Get Professor McNeill's supervisor position in writing; I trust his word, but documentation is key!</p> <p>Rewrite Project description draft into a cleaner, more professional explanation</p> <p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Copy AJ-Meeting notes into a shortform .txt on this computer</p> <p>Looked at supervisor form; let's make it easier on Prof; consolidate and categorize the hour amounts from last week, and formulate totals for this week into this excel too, yeah?</p> <p>Get to coding!</p>
2/4/2025 10:30AM to 10:45AM	0.25 hours	Other	<p>Copied yesterday's notes into a .txt, while expanding a bit on them, for future reference</p>	<p>Get Professor McNeill's supervisor position in writing; I trust his word, but documentation is key!</p> <p>Rewrite Project description draft into a cleaner, more professional explanation</p> <p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Looked at supervisor form; let's make it easier on Prof; consolidate and categorize the hour amounts from last week, and formulate totals for this week into this excel too, yeah?</p> <p>Get to coding!</p>

2/4/2025 10:45AM to 12:45AM	2 hours	Design	<p>Rewrote my project description graph to be a BIT more concise; not at a professional level, but for our/my own, personal reference level? Adequate.</p>	<p>Get Professor McNeill's supervisor position in writing; I trust his word, but documentation is key!</p> <p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Looked at supervisor form; let's make it easier on Prof; consolidate and categorize the hour amounts from last week, and formulate totals for this week into this excel too, yeah?</p> <p>Get to coding!</p>
2/5/2025 12:15PM to 2:00PM	1.75 hours	Coding	<p>Started creating the setup-wizard using C# & visual studio 2022; mostly dealt with library dependencies, updating software issues, and downloading the proper tools.</p> <p>Felt like a wash.</p>	<p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Looked at supervisor form; let's make it easier on Prof; consolidate and categorize the hour amounts from last week, and formulate totals for this week into this excel too, yeah?</p> <p>Get to coding!</p>

2/8/2025 9:00AM to 12:00PM	3 hours	Coding	<p>Used VS-2022 template to attach a windows setup-project to a windows-dekstop app, checked to see if it built, modified it a bit, it does now,</p> <p>Uploaded barebones version to github</p> <p>Continued to modify application, to 'make it sufficiently my own'</p>	<p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Looked at supervisor form; let's make it easier on Prof; consolidate and categorize the hour amounts from last week, and formulate totals for this week into this excel too, yeah?</p> <p>Add "Create Desktop Shortcut?" option to install wizard; Hookup to default "Windows uninstall option"; or, at least, double-check to see if that's just not working on our machine (would NOT be suprised, at this point)</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>
2/8/2025 12:15PM to 12:45PM	0.5 hours	Other	<p>Reformatted this entire excelsheet; should be easier to read, both regular and on pdf, + has accumulated hours ready to read at a glance</p>	<p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Meet & update prof monday? Or, at least email!!! While more chances for more hands on talk can/will happen later on in the semester, I want to start strong, too!</p> <p>Add "Create Desktop Shortcut?" option to install wizard; Hookup to default "Windows uninstall option"; or, at least, double-check to see if that's just not working on our machine (would NOT be suprised, at this point)</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>

2/8/2025 1:00PM to 3:00PM	2 hours	Research	Looking into further resources & guides on both encryption software, & cryptography in general	<p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Meet & update prof monday? Or, at least email!!! While more chances for more hands on talk can/will happen later on in the semester, I want to start strong, too!</p> <p>Add "Create Desktop Shortcut?" option to install wizard; Hookup to default "Windows uninstall option"; or, at least, double-check to see if that's just not working on our machine (would NOT be suprised, at this point)</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>
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github link:

https://github.com/AHMED-OMER-Program01/CISC_4900_PROJECT-

Week reflection:

This week was...

Well, it was well, overall.

I started doing actual work on the coding side of my project, I met up with one of my friends and dedicated even some of my non-set-aside time to thinking and developing the project, and in general, I have a more concrete, formalized plan on **what** I'm gonna do, and how.

But, well, it feels lackluster; personal issues came up family-wise, and other duties, the works; despite arguably thinking about the project even more on average this week, my hours were less, and it shows. I **know** I'm gonna bounce back; there's no real obstacles in my path; I have a plan, it **is** feasible, and the hardest part (knowing **how** to start, and starting inofitself) is done. I guess overall, my takeaway for this week is that, even if I plan, schedules will fall through, and I need to be better at **adapting**, not **accepting**.

Cheers for next week, though! Hopefully, I'll talk to McNeill more!

<u>THIS WEEK</u>	
<u>Types of hours:</u>	<u>SPENT;</u>
supervisor discussions, emails:	0.25
Team discussions, emails:	0
Design:	2
Coding:	4.75
Testing & Debugging:	0
Research, training, learning:	2
Other:	1.75
<u>TOTAL:</u>	<u>10.75</u>
<u>IN ABSOLUTE TOTAL:</u>	
<u>Types of hours:</u>	<u>SPENT;</u>
supervisor discussions, emails:	0.75
Team discussions, emails:	0
Design:	2
Coding:	4.75
Testing & Debugging:	0
Research, training, learning:	4.5
Other:	15.5
<u>TOTAL:</u>	<u>27.5</u>

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
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2/10/2025 12:15PM to 12:30PM	0.25 hours	Testing	<p>Went to campus library to download my github version to test base- functionality;</p> <p>Downloaded fine & fast, but the setup.exe was auto-blocked; will attach picture to/as proof;</p> <p>(EDIT; no, I'm NOT gonna put it in this spreadsheet, looks clunky. Gonna put it in my 'proofs of work' folder, so when I upload the thing later to my github, It'll be there, alongside everything else. Sorry!)</p>	<p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Meet & update prof monday? Or, at least email!!! While more chances for more hands on talk can/will happen later on in the semester, I want to start strong, too!</p> <p>Add "Create Desktop Shortcut?" option to install wizard; Hookup to default "Windows uninstall option"; or, at least, double-check to see if that's just not working on our machine (would NOT be suprised, at this point)</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>
2/10/2025 1:00PM to 2:00PM	2 hours	Coding	<p>While waiting for a miscommunication meeting(EDIT FROM THE DAY AFTER; *not* miscomm, but errors from beyond both our control), fixed the optionality of the Desktop-Creation box; Now, when using the install wizard, Users can choose to NOT have the desktop-shorcut appear. In other words; I long ago specififcally tested the uninstall function (a necessary requirement of testing my code, lmao), but I haven't yet tested on ANOTHER comp, as noted last entry.</p>	<p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Update Github with the better version of the project!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>

2/11/2025 10:30AM to 10:45AM	0.25 hours	Supervisor (emails)	Wrote and responded to an email to Mcneill; should/will be setting up a ZOOM meeting to make-up for the unfortunate miss from yesterday!	<p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Update Github with the better version of the project!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>
2/11/2025 11:45PM to 1:15PM	1.5 hours	Bugfixing	<p>ORIGINALLY, I was just trying to revamp my github; but then I realized the desktop-optionality WASN'T working completely, so I looked into that; From then which, I realized the building of my local installer wasn't working, which led me to understanding that my base project-setup had some conflicts from seemingly nowhere. TLDR; had to completely redo project so far, then bug-test the hell out of the result.</p> <p>Current plan; Recomplete the little personalizations I did previously; Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Ironically, I think I'm still ahead of my projected schedule. Hurray?</p>	<p>Current plan; Recomplete the little personalizations I did previously; Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>

2/13/2025 10:45PM to 12:30PM	1.75 hours	Research	<p>Instead of leaving it *technically* up in the air, I did more research into *what specific* encryption algorithms I'm going to use. After looking through my conditions(one standard, one Post-Quantum, one obscure, Windows-Microsoft favorable if possible, etc), & my options; I concluded</p> <p>Standard AES, esp. since Microsoft has a walkthrough; it'll serve as an introduction to creating a proper encryption application for the first time</p> <p>Lattice-encryption; either via a custom algol-code, based off my own understanding, or the KEM (Key encaps Mech) would be done via KYBER; a trusted example that's been around for a few years; while less fun overall; serves the educational aspect via its prior existent presence.</p> <p>And finally... I'll leave the third one for next week!</p>	<p>Current plan; Recomplete the little personalizations I did previously; Rename installer/project, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>
2/13/2025 1:30PM to 1:45PM	0.25 hours	Supervisor?	<p>I had to take an emergency family call (sibling is living by themselves for the first time, politics aren't looking too hot, had to take it), and thusly, didn't make it for the supervisor zoom meeting I SCHEDULED AHHHHHHHH</p> <p>So, thinking fast, (but in a very, very drained fashion), I opted to immediately start recording what I had for the project so far, so AT LEAST it could be said an update was made/attempted.</p> <p>I'm mostly apologetic towards Professor McNeill; it's not intentional, but still, his time was wasted, and I didn't want to ever do that!</p> <p>Ugh.</p> <p>Link here; https://www.youtube.com/watch?v=JGtxCgxSISM</p>	<p>Current plan; Recomplete the little personalizations I did previously; Rename installer/project, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Formalize Project-Map/Path (check blackboard; pretty sure doing this is a requirement anyway; they're more likely to have resources to help us do this well/better than not!)</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>

2/15/2025 10:30AM to 3:45PM	5.25 hours	Other	<p>I don't, and still don't know, that if/since I'm doing a project by myself, if I *also* have to prepare a project diagram & such, or, if that's *only* for projects with groups of people within them.</p> <p>Regardless, did it, and got it out of the way; will submit monday night, in case something happens inbetween now & then..</p> <p>Between this, & my many, many notes; I'm okay with saying I have a solid Project-Map/Path.</p>	<p>Current plan; Recomplete the little personalizations I did previously; Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>
2/16/2025 12:15PM to 1:30PM	1.25 hours	Research	<p>Legitimately a bit spontaneous;</p> <p>Just went on to double-triple-recheck-quadruple check again that, if what I'm doing/planning is viable (conclusion: yes); then, went on to try to find a white-page or something for a thrid, obscure algorithm.</p> <p>No luck.</p>	<p>Current plan; Recomplete the little personalizations I did previously; Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia)</p>

2/17/2025 5:00PM to 7:00PM	3 hours	Other	<p>Had no internet for a solid portion of time; decided to start fixing old PC that I planned on factory-resetting for testing-purposes a bit now, rather than later, just to save time/be efficient/do SOMETHING productive today.</p> <p>Spent two and a half hours looking for old power cables, cleaning the PC's tower, and watching it slowly, slowly try to update and turn on.</p> <p>Then, spent another half an hour watching it continuously quit and kill itself just to spite me.</p> <p>I'm sure this is my fault, somehow; but I did put in the work; so I'm logging it. Hopefully, either next time, I can finagle something, or, worst case, I have to take it to a shop for repair.</p> <p>joy.</p>	<p>Current plan; Recomplete the little personalizations I did previously; Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia).</p> <p>Fix old PC. Don't be an idiot about it..</p> <p>And update the github again.</p>
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github link:

https://github.com/AHMED-OMER-Program01/CISC_4900_PROJECT-

Week reflection:

Overall; the project's as clear-cut as it's gonna get. I'm just gonna have to start to apply to the grind of it all;.

Throughout the week, there have been several complications keeping me from doing anything I feel like was true, productive work. Needing to completely revamp my current project due to some latent file-conflict I *still* don't fully understand what was, days later, my Asthma acting up (now using Fluticasone-Propionate & Salmeterol. Hurray.), having that supervisor meeting be missed due to an emotional family call, the internet cutting out for a bit today, presumably because of the wind, and my goddamn old-tower PC *refusing* to work.

It's been a week.

But then again, I guess it's always been, no?

I just hope things get better. Overall, project wise, still ahead of shcedule, so, that's fine, at least.

Here's to another week, yeah?

<u>THIS WEEK</u>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	0.5
Team discussions, emails:	0
Design:	0
Coding:	2
Testing & Debugging:	1.75
Research, training, learning:	3
Other:	8.25
<u>TOTAL:</u>	15.5
<u>IN ABSOLUTE TOTAL:</u>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	1.25
Team discussions, emails:	0
Design:	2
Coding:	6.75
Testing & Debugging:	1.75
Research, training, learning:	7.5
Other:	23.75
<u>TOTAL:</u>	43

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
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2/18/2025 10:15PM to 11:0AM	0.75 hours	Coding	Attempting to finish up the Application work by adding the base button to panel to change functionality; want to start on AES implementation now, sooner, rather than later.	<p>Current plan; Recomplete the little personalizations I did previously; Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia).</p> <p>Fix old PC. Don't be an idiot about it..</p> <p>And update the github again.</p>
2/18/2025 12:30PM to 2:00PM	1.5 hours	Coding	Second verse, same as the first!	<p>Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Create base planned classes inside the application (sidebar with algorithm list, specific algol, rich-or-simple text call, etc. Basically; start shaping the minutia).</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>And update the github again.</p>
2/18/2025 5:30PM to 6:15PM	0.75 hours	Coding	<p>Sidebar & reading from .txts are a go! After I got the basic framework down, completing the actual functionalities was easy!</p> <p>Application looks ugly, and doesn't scale/feel as well as much as I'd like, but also; this is a learning/programming/application/encryption/cryptography project. Not a Multimedia Applications project (lol); ugly is fine, as long as it works!</p>	<p>Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>And update the github again.</p>

2/19/2025 12:15PM to 12:30PM	0.25 hours	Supervisor	<p>GOT TO HAVE AN INPERSON MEETING WITH MCNEILL! YEEEEAAHHHHH!!!!</p> <p>We talked shop, and I reiterated & reshowcasted my project's stated ideas & goal, explained my step-plans for completion, and showcased the little I made so far!</p> <p>Since I get anxious easy, it obviously was so, but it was fun! He pointed out how itd probably be fine if I switched the project a bit-used already made cryptography libraries for the encryption process (quoted the common error of companies attempting to build in-house, & the errors created from minor mathematical errors & such; "Don't build your own crypt"; or something similar to that' sorry forgot the specific phrase)</p> <p>And while I agreed, we both noted how if I did that, I would need to go even harder on the educational aspect, and that I'd lose the personal-learning experience of attempting to build my own encryptors myself. So, considering all that; a mix was decided; I would yes, implement a standard libraries; but after I do such, I'd attempt to build my own; and use the standard-versions as benchmarks (if my custom can correctly be decrypted by standard; that's the benchmark met!)</p> <p>Other than that, he pointed out it's perfectly fine to backlog with incredibly basic cyphers, which was a good point!</p> <p>Overall, great meeting!</p>	<p>Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>And update the github again.</p> <p>Add a standard cryptography library to the project; incorporate their function!</p>
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2/19/2025 1:00M to 2:00PM	1 hour	coding	<p>Started Implementing the standard Windows AES library!</p> <p>Not much progress yet though, but hey! Only the first hour of this segment; tons more to go!</p>	<p>Rename installer/roject, because currently, when running, I made it say "Installing 4900installer" which is just straight up *dumb*, and FINALLY continue to the application itself!</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>And update the github again.</p> <p>Add a standard cryptography library to the project; incorporate their function!</p>
2/23/2025 6:40PM to 6:55PM	0.25 hours	Other	<p>Just filling out the survey; realized I didn't do it yet! Almost a major Whoops!.</p> <p>On Why there was a large gap inbetween this entry, and the last;.</p> <p>I'm going to be honest; I got sick, then, my *mother* got sick- and now we're still kind of half-are. I'm not even sure I'm gonna make it to campus tomorrow, it's a bit of stupid gamble;</p> <p>Like, while I *did* technically do *some* research work throughout these days, when I could use my phone & such- they were so scattered time-wise & unsubstantial in results, that, well, I just can't reasonably count them.</p> <p>It's my bad, but considering the circumstances, I can't even make myself feel guilty- when it comes to health, it just feels like luck, at this point. At least, I *was* *ahead* of schedule- now I'm just ON schedule (lol).</p>	Goals remain the same!

github link:

https://github.com/AHMED-OMER-Program01/CISC_4900_PROJECT-

Week reflection:

Well, this entire week felt like a minor wash. Started *out* incredibly well; started getting into a groove of work that I liked, finally managed to snag that meeting with Mcneill, my supervisor, that we've been meaning to get to, and everything.

Then, I used thursday to do my other-course assignments, then, I fell sick on friday.

And *then*, whatever *I* had, my mother recieved, plus a migraine, so, I was just. Dealing with that, plus hovering over her, wondering if I had to get us both to the ER, or something..

You'know, I wrote something along the lines of not even being mad, just annoyed, or something, but no, I'm actually, kinda getting pissed thinking about it.

It's getting annoying. I was happy with my pacing- I was ahead of schedule. And while now, I'm not like, *behind*; far from it... I'm still not *ahead* anymore, and it feels like I was cheaped-out of my advancement..

Gah, I dunno.

I know the mature thing is to acknowledge that tomorrow is a new day, with more oppertunities to catch up..

I just- hope I actually get to get there, next time. Considering my luck, so far- I'm going to wake up tomorrow, and we're being like, invaded by aliens or something. Ugh..

Till next time

<i>THIS WEEK</i>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	0.25
Team discussions, emails:	0
Design:	0
Coding:	4
Testing & Debugging:	0
Research, training, learning:	0
Other:	0.25
<u>TOTAL:</u>	4.5 (UGH)
<i>IN ABSOLUTE TOTAL:</i>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	1.5
Team discussions, emails:	0
Design:	2
Coding:	10.75
Testing & Debugging:	1.75
Research, training, learning:	7.5
Other:	24
<u>TOTAL:</u>	47.5

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
2/24/2025 7:00PM to 7:30PM	0.5 hours	Bugfixing	<p>Updated the Github; but then, recognized a load-error in the base-case; this took half? An hour.</p> <p>Also finally renamed installer-project; but, then, wrote the wrong version-number. Reads 1.002, instead of 0.002; not something someone who isn't in th files will see, but still.</p>	<p>Make installer be able to update older-versions found on COMP? uninstalling the old version, then re-installing the new one, while great for testing that, is dumb</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Finish AES implmentation</p>
2/26/2025 10:00AM to 11:00AM	1 hours	Coding	Further coding on implementing AES to winforms	<p>Make installer be able to update older-versions found on COMP? uninstalling the old version, then re-installing the new one, while great for testing that, is dumb</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Finish AES implmentation</p>
2/26/2025 12:30PM to 2:00PM	1.5 hours	Coding	<p>Further coding on implementing AES to winforms;</p> <p>Specifically; successully completed the AES encryption! Wohoo!</p> <p>Need to hook up to winforms in a more reasonable manner, though</p>	<p>Make installer be able to update older-versions found on COMP? uninstalling the old version, then re-installing the new one, while great for testing that, is dumb</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Implement Kyber, or Kyber-like library</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>

2/27/2025 10:00AM to 1:30PM	3.5 hours	Coding	<p>Reformatted Encryption windows again; they look slightly different, added radio-buttons to ask if the user wants their results pasted *within the application*, OR, according to a PATH-URL</p> <p>Created char-limit to input&output textboxes (100)</p> <p>Decryption's key-reading is acting odd, will fix next time!</p>	<p>Make installer be able to update older-versions found on COMP? uninstalling the old version, then re-installing the new one, while great for testing that, is dumb</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Implement Kyber, or Kyber-like library</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>
3/1/2025 2:00PM to 3:30PM	1.5 hours	coding	<p>Fixed the Decryption key-reading issue, and added a few error try-catches!</p> <p>Going to add the 'create new file' and 'add to desktop functionality', then, I'll be done with AES!</p>	<p>Make installer be able to update older-versions found on COMP? uninstalling the old version, then re-installing the new one, while great for testing that, is dumb</p> <p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Implement Kyber, or Kyber-like library</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>
3/1/2025 4:30PM to 5:30PM	1 hour	coding	<p>Still... working on the issue. Going to reset my COMP, and return to this afterwards</p>	<p>Same as before; Not going to Copy-paste the above until next day-session(s)</p>

3/1/2025 5:45PM to 7:30PM	1.75 hours	coding	<p>OKAY, SO;</p> <p>While I made writing to Desktop work, writing to files *isn't* for some ungodly reason. I'm going to take the rest of the day off, and return tomorrow; fresher eyes'll help, maybe</p> <p>Also I made it so the installer will replace older versions; need to test that further, though;</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>THE DEMO VIDEO! AHHHH!</p> <p>Implement Kyber, or Kyber-like library</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>
3/2/2025 2:00PM to 3:45PM	1.75 hours	bugfixing	<p>The break was a good idea; within ten minutes, I fixed the writing to Desktop problem.</p> <p>But then I spent the next longest time just watching my desktop crash.</p> <p>I don't even know, anymore. God hates me and I hate the world back. I'm logging it, however; need to come back later, and do the video.</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>THE DEMO VIDEO! AHHHH!</p> <p>Implement Kyber, or Kyber-like library</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>

3/2/2025 8:45PM to 9:00PM & 9:15PM to 9:30PM	0.5 hours	Other	Just. Almost forgot to do the Demo Recording! I was planning on doing it the last day, so that wasn't an issue, but man! EDIT; Weekly reflection & hour totals- prooobably should *also* be recording these touch-ups as I do them, if they're, yes, taking upwards of 15 minutes, huh?	Test install & uninstall & such on another COMP!!! Incorporate Github Projects!!! Fix old PC. Don't be an idiot about it. Implement Kyber, or Kyber-like library Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it! Keep coding!
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github link:

https://github.com/AHMED-OMER-Program01/CISC_4900_PROJECT-

Week reflection:

It's been a fun week, actually!

There isn't much to say, however; I *basically* finished AES-Standard implementation, and mostly finalized the formatting of everything else. Now, I just gotta call libraries, and create my own bootleg-versions, and some more smaller, simpler algorithmis (Like shifts, & such).

Yeah! It's not much, to talk about, but it was a lot of work, and I'm proud of it!

<u>THIS WEEK</u>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	0
Team discussions, emails:	0
Design:	0
Coding:	10.25
Testing & Debugging:	2.25
Research, training, learning:	0
Other:	0.5
<u>TOTAL:</u>	13
<u>IN ABSOLUTE TOTAL:</u>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	1.5
Team discussions, emails:	0
Design:	2
Coding:	21
Testing & Debugging:	4
Research, training, learning:	7.5
Other:	24.5
<u>TOTAL:</u>	60.5

Wish I wasn't sick last week, UGH

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
3/3/2025 10:00AM to 11:00AM	1 hour	Coding	<p>Started uniforming error-messages with an Error-file, making the file-checks just a function-call, instead of a whole, thing, each encryption-button-call-function, and, I got rid of the 'create file' button, & it's funcitonality. It's, a bit dumb; I'll just make it always create to Desktop; that's a simple enough method- users can move those files later, themselves!</p> <p>NOT finished with everything yet, but still, like always (it feels like), close!</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Implement Kyber, or Kyber-like library</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>
3/3/2025 12:15PM to 2:00PM	1.75 hours	Coding	<p>Same as the last; finishing up those segments, plus revamping functions in general, for less space & more reusability!</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Implement Kyber, or Kyber-like library</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>

3/3/2025 7:00PM to 7:30PM	0.5 hours	Coding	<p>AES STANDARD IS DONE! 256 IS CONSIDERED POST-QUANTUM TO BOOT!</p> <p>Everything else now would just be tweaks; Noting those in the TODO of the file, and NOW JUST GONNA MOVE ON TO KYBER LET'S- A-GOOOOOOOOO!</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Implement Kyber, or Kyber-like library</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>
3/4/2025 10:45AM to 1:00PM	2.25 hours	Research	<p>Attempting to see if I should focus on pure KYBER implementation, or switch to another library, such as LMS, SABER, or Picnic.</p> <p>I've been researching the NIST(the National Institute of Stanard Tech)'s Post-Quantum Standardization rounds/Competition, and while KYBER *seemed* to mostly come out on top, there've been allegations of lampshading and 'horse-rigging' in certain industry-focused blogs after the third round back in 2020, though, so, I'm not going to touch that *exact* subject with a decent pole. On the flip side, however; these libraries are all public, with no-restiction unlicense copyrights; meaning I can learn the implementation of several as I go; Which will be good for the sucational segment, if not if/when/hopefully(?) I build my own, tiny, and worse, version(s)...???</p> <p>Conclusion; going to use the BouncyCastle library-set!</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>

3/5/2025 12:30PM to 12:45PM	0.25 hours	Supervisor	<p>Met up with McNeill again! Showcased my program so far, talked my current plan- Kyber & such via the BouncyCastle library, and he mentioned two really great points;</p> <p>While my program is *understanable*, having a textbox or two next to, or above, the textboxes themselves to explain would be for the best; I'm thinking the space that currently has the Garfield picture?</p> <p>And secondly; there are LOADS of programs that delt with en, & decryption, but due to being obtuse/hard to parse, they failed- despite their technical/programmical success. The example given was PGP (pretty good privacy); which was a secure email service, but due to it's forced inclusion of technical detail & minutia, fell off. It's a good talking point for any future talks, & a good defense of the minor focus on looks, if it ever comes up- researching this, and applications/programs like it, would be worth it!</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Research things like the history of PGP (Pretty Good Privacy)</p> <p>Get ready for live presentation!!! IT'S ON MARCH 11TH! AT 10:20AM!! We're gonna be doing this at home, so, be careful!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>
3/7/2025 2:30PM to 5:30PM	3 hours	Research	<p>I've learned so much</p> <p>And yet nothing</p> <p>About PGP. I feel like I've wasted three hours of my life I'll never get back.</p> <p>I'm done for the day, GOD.</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Fix old PC. Don't be an idiot about it.</p> <p>Get ready for live presentation!!! IT'S ON MARCH 11TH! AT 10:20AM!! We're gonna be doing this at home, so, be careful!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>

3/8/2025 5:15PM to 9:45PM	4.75 hours	Other	<p>Good news! I ffixed my damn PC! Technically. It absolutely resfuses to connect to the internet. I. I don't even know, anymore.</p> <p>A few neighbors expressed support about/with my project, but they also talked me out of doing the whole, survey & experience thing. Guess I was too overeager?</p> <p>REGARDLESS, I've, again, spent too much time on a thing that now probably won't ever come up again, and I regret even attempting. At best, I did a thing I should've a long time ago (fixed PC)- at worst, I wasted time attempting to prepare a way to 'test' the educational bit of the project, which, I guess, doesn't *need* to be tested, anyhow, I guess. GAH.</p> <p>Should I just have it be an encryptor application, flat???</p> <p>Talk/prep with Matthew, GOD, AHHHHH WHY IS EVERYTHING *LIKE* THIS??</p>	<p>Test install & uninstall & such on another COMP!!!</p> <p>Incorporate Github Projects!!!</p> <p>Get ready for live presentation!!! IT'S ON MARCH 11TH! AT 10:20AM!! We're gonna be doing this at home, so, be careful!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>
3/9/2025 10:15AM to 10:30AM	0.25 hours	Testing/ bugfixing	<p>Finally tested install-uninstall & such on another windows COMP (the PC I just fixed, yesterday; yes, I got the internet to work, took a few overnight updates & such, but I'm not counting that time for project-progress for obvious reasons)</p> <p>REGARDLESS; works. Woo. Hoo.</p> <p>I swear that machine is going to sprout legs one day, and drive me to drink.</p>	<p>Incorporate Github Projects!!!</p> <p>Get ready for live presentation!!! IT'S ON MARCH 11TH! AT 10:20AM!! We're gonna be doing this at home, so, be careful!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>
3/9/2025 10:30AM to 12:30PM	2 hours	Other	<p>Just, prepping for the 10-minute interview I have on Tuesday; the live presentation?</p> <p>GOD, I *know* I incorporated enough wiggle-room in the flow of the project beforehand just in case, so I'm fine, but I haven't even finished incorporating KYBER, SABER, or any of those things yet! AHHHHHHHH I'm worried I'm gonna mess this up!</p>	<p>Incorporate Github Projects!!!</p> <p>Get ready for live presentation!!! IT'S ON MARCH 11TH! AT 10:20AM!! We're gonna be doing this at home, so, be careful!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>

github link:

https://github.com/AHMED-OMER-Program01/CISC_4900_PROJECT-

Week reflection:

I feel like I barely got any time to do anything; It's all been writing this, reading that, etc!

While I'm still optimistic about/for the project, the drain is ABSOLUTELY getting to me. I've been worrying about the my presentation, I've spent what feels like a majority by far of my entire week just, researching nonsense, and my PC's functionality, while neat in the home-life sense, basically showed itself to be agiant waste of time.

And did I mention I'm sick? I'm sick as the goddamn leeches in france. And I still did stuff! It's majorly why a large part of my week has been just, reading! I'm not even sure I'll be able to come *in*, tomorrow!

GOD, it feels like the universe is conspiring against me, and while I *GET* that's just like. A part of being on/doing a project, ha-ha, *it's aggravating*! I just want to make my hours, and *actually do my project*! I *like* my project! I *want* to somplete it!

So why does it feel like I'm not being allowed to?

I guess this became more of a vent, then a reflection- NOTE; edit this all out, later

<u>THIS WEEK</u>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	0.25
Team discussions, emails:	0
Design:	0
Coding:	3.25
Testing & Debugging:	0.25
Research, training, learning:	5.25
Other:	6.75
<u>TOTAL:</u>	15.75
<u>IN ABSOLUTE TOTAL:</u>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	1.75
Team discussions, emails:	0
Design:	2
Coding:	24.25
Testing & Debugging:	4.25
Research, training, learning:	12.75
Other:	31.25
<u>TOTAL:</u>	76.25

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
3/11/2025 10:00AM to 10:30AM	0.5 hours	Other	<p>Yup. Spent all day yesterday in bed. Ugghghhh.</p> <p>Prepped for 10:20 meeting, had 10:20 meeting, which ran a bit overtime, bt, uh, yeah!</p> <p>Guuuesssss who overstressed about the presentation for literally nothing, like they do always, for everything, again?</p> <p>This idiot! Not that that's *bad* news- far from it; being an anxious mess in a more casual-meeting just showcasing work done so far is WAY better than like. Being unprepared for a meeting, flat-</p> <p>Professor Chuang mentioned how I should work on that, and I agree- presenting, showcasing, I get a sort of stage fright, and I know it's an issue & skill I need to work on! So, the advice was welcomed, absolutelty!</p> <p>In other news/bits; she talked her own experience making a proper UI for users to navigate, and gave a nice suggestion about auto-removing quotation marks. Thanks, Chuang!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Keep coding!</p>

3/14/2025
12:45PM to 5:30PM

4.75 hours

Research

OKAY; SOO;;

Between assignments and the live presentation, I haven't really done much, so, I thought, might as well research at least a *little*, right? Get my groove on, just before doing the majority of my coding tonight, and tomorrow, and Sunday.

But then I went down a goddamn rabbithole with RSA versus DSA; case and point, I'm going to have to reformat a decent chunk of my application, and I hate myself.

Uggghhhhhh;;

LOOK; I'll explain *next time*, OR, when I GET TO IT, right now, I'm just gonna go and start cooking.

Incorporate Github Projects!!!

Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!

FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION

LOOK MORE INTO THE ML-DSA (nationally standardized dilithium) ACTUAL
 FORMATTING AND TEXTS

MAYBE ACTUALLY PREP FOR THAT MEETING ON WEDNESDAY WITH MCNEILL,
LOSER!

AAAAAAAAAHHHHHHHHHHHHHHHHHHHHHHHHHH

Keep coding!

[illegible]

3/16/2025 1:15PM to 4:30PM	3.25 hours	Research	<p>MUCH BETTER NEWS (Also I REALLY gotta go back and edit that above section to less miserable);;</p> <p>It was hidden within the internal mangum opus of Hermes's very own bird- the flightless heathen beyond the pale garden-</p> <p>But I found it! An actual *updated* version of the BouncyCastle API that's NOT just Java, has NOT deprecated function data & descriptions & functions & returns & basically everything else, AND HAS POST-QUANTUM STUFFS (because the C# segment manuals I found were GENERAL BouncyCastle, and often were dated anywhere from 2016 to 2020 to 2023; all with *nothing* post-quantum);</p> <p>Issue was; functions didn't work in my code- but I KNEW this would happen, and forgot to mention earlier, so it was a quick fix; the GNU version I downloaded was an *older* version, ontop of EVERYTHING</p> <p>GOD. UGH.</p> <p>Anyway; It's ALL FIXED, and so I can ACTUALLY START DOING STUFF NEXT WEEK LETS GOOOOOO</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>MAYBE ACTUALLY PREP FOR THAT MEETING ON WEDNESDAY WITH MCNEILL, LOSER!</p> <p>Keep coding!</p>
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github link:

https://github.com/AHMED-OMER-Program01/CISC_4900_PROJECT-

Week reflection:

This entire week was STRESSFUL;

The status of the bouncycastle castrope really put everything into a sudden stop-- I didn't want to go back to just messing about with *WinForms*, of all things, so, I put everything I had into trying to troubleshoot the problem before it caught-up to me and killed the project, so to speak;

And while required going through stuff like this (<https://downloads.bouncycastle.org/csharp/>);;; I EVENTUALLY found a PQC manual.

Though, wanna know WHY it was suddenly so fast?

As far as I'm aware?

They were just goddamn updating their website. NOT that the PQC manual I found was ON the main website (although the download link WAS still connected to their website's port;; I couldn't find it on their website itself- call me blind or goddamn dumb, but I'm tired, okay?);;;;

And beyond that. BEYOND THAT;;

The manual I found WAS STILL FOR JAVA; So, it was within the OTHER API list--- It just works for me, since it gives examples at the bottom THAT USES C#; So, THUSLY, I can follow along, *now* knowing the appropriate naming conventions- if I wanna translate between Java & C#, at least.

Worst case, I double-dog-save my project with a few backups, and I hold a java file up to it like a scared cartoon scientist

Hopefully, as always, next week'll be better?

THIS WEEK	
Types of hours;	SPENT;
supervisor discussions, emails:	0
Team discussions, emails:	0
Design:	0
Coding:	0
Testing & Debugging:	0
Research, training, learning:	14.25 AHHH
Other:	0.5
TOTAL:	14.75
IN ABSOLUTE TOTAL:	
Types of hours;	SPENT;
supervisor discussions, emails:	1.75
Team discussions, emails:	0
Design:	2
Coding:	24.25
Testing & Debugging:	4.25
Research, training, learning:	27
Other:	31.75
TOTAL:	91

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
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3/17/2025 5:30PM to 6:30PM	1 hour	Other	<p>I've been prepping for that Mcneill meeting; I'm of two minds; On one hand- prepping actually hurt me, I think, during the live presentation- I'm not sure if it's just a zoom thing, a meeting thing, or an anxiety thing??</p> <p>Meh.</p> <p>It's gonna be an in-person meeting, so, it *should* be okay??</p> <p>On the OTHER hand, if I just go in half-cocked, I'm probably going to just go on rambling about how messy last week was, which is, bad. NOT like I have actual other things to show-off- just a handful of PDFs I saved out of near dozens, and like. Minor API-based faux-ptsd.</p> <p>I wrote up a thing of bulletpoints, but who knows if I'll even use it??</p> <p>Whatever; it's a thing off the list!!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>
3/18/2025 5:15PM to 7:00PM	1.75 hours	Coding!	<p>FINALLY got some coding on the project in! Feels like it's been forever!</p> <p>Now; a while back last week, I mentioned something about DSA & RSA screwing me up, and while I know *what* I was thinking of, I'm actually... Not entirely sure why I phrased it that way? Then again- exhaustion would be a pretty goood guess (lol);</p> <p>Anyway- it just means I'm gonna adjust the internal plans of the project a bit- nothing external;; For key-signatures, I'm just going to showcase, well, key verification-- not as snazzy as actionable file encryption, but bizazz isn't all there is to it, is there!</p> <p>Other than that, I screwed around with winforms a bit to *actually* include a home page (I NEED to start typing things up), and did some minor fixes, improvements (such as kathrine's suggestion), and changes!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>

3/19/2025 12:15PM to 12:45PM	0.75 hours	Research	<p>Was just double-checking that nothing like that BouncyCastle scare was going to pop-up; double-checking my process, my dependencies, my plans, etc. Am half-considering re-labelling this 'other', but I spent enough time percent-wise looking things up that it's good</p> <p>Also; just had a midterm in the class I had with my supervisor;; sadly, had to call off staying over for office hours- despite thinking I did decent on the test, I legit have to focus on some other assignments right now! Graphics & Workstation Prog is killing my @ss!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Send Mcneill an email about possibly setting up a zoom meeting!</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>
3/19/2025 9:00PM to 9:15PM	0.25 hours	Supervisor	<p>Since I didn't go to office hours, like I promised to, I sent an email to check out posible times we could arrange an online meeting!</p> <p>Worst case, I can record and upload my second ever video to youtube (lol)</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Watch out Outlook for email response from Mcneill-- also, the meeting itself!!!</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>
3/20/2025 10:00AM to 12:30PM	2.5 hours	Other	<p>Okay, so, just like two times ago, I REALLY want to just label this other, not research- but it's what I was doing? Looking stuff up & reading standardizations- difference is, I was majorly updating all the softwares I have- VS, double-checking my libraries, etc.</p> <p>Meh; I'll cut it later, I guess? For now, I'm gonna jump into coding!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Watch out Outlook for email response from Mcneill-- also, the meeting itself!!!</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>

3/20/2025 12:30PM to 2:30PM	2 hours	Coding!	<p>ML_DSA IS A GOOOOO YEAAHHHHHH!!!!</p> <p>I can legit say now my program has government approved coding securty (lol)</p> <p>YEEAAHHHHH!!!</p> <p>I also did some bumgling with SABER & old Dilithium, but that's besides the point; I just gotta hook this up to winforms, after i make the key-verification format for a tab, and I'm good to go!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>Watch out Outlook for email response from Mcneill-- also, the meeting itself!!!</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>
3/21/2025 2:30PM to 2:45PM	0.25 hours	Supervisor!	<p>Had that meeting with Mcneill! Yeah!!!</p> <p>Just like last time, I received, uh, pretty bad news directly before it, though. UNLIKE last time, I chose to abstain from interacting until my meeting was over, AND it turned out to be a false-flag! Er; bad wording; it turned out all-right- not a *flase-flag*; it was a flag that was raised and seen and figured out to be, luckily, a mistake?</p> <p>GAH, I CANNOT speak right not, whatever!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>

github link:

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Week reflection:

A haiku, for ye, so looks upon me & my works (ye mighty), from a future shore, far, far;

I dreamt I could run.
I sought folly with the angels.
I worked no more.

AKA; midterms; I've been dealing with midterms for most of this week;
But AGAIN, it seems, that this week was nearly CODELESS

AM I CURSED? AM I CURSED BY GOD? IS THERE A SACRIFICE I'M EXPECTED TO MAKE? I DON'T OWN A LAMB, MUCH LESS A FARM, KETHER!

But, yeah; jokes aside--
I'm just gonna set it aside now-- Besides the studying for that one last midterm of mine in two weeks;
I'm just gonna go ham on coding next weekend!
HAAAM!

Apologies if this is an unprofessional update; I'm unironically running on two hours of sleep from throughout the last two days, and it's 3 o'clock right now.
I'm going to bed! HAHAHAHAHAHAHA!

<u>THIS WEEK</u>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	0.5
Team discussions, emails:	0
Design:	0
Coding:	3.75
Testing & Debugging:	0
Research, training, learning:	0.75
Other:	3.5
<u>TOTAL:</u>	8.5
<u>IN ABSOLUTE TOTAL:</u>	
<u>Types of hours;</u>	<u>SPENT;</u>
supervisor discussions, emails:	2.25
Team discussions, emails:	0
Design:	2
Coding:	28
Testing & Debugging:	4.25
Research, training, learning:	27.75
Other:	35.25
<u>TOTAL:</u>	99.5

Date	Duration	Type	Description of completed work	Challenges and/or Next Steps
3/24/2025 4:30PM to 8:30PM	4 hours	CODING!	KAY; SO, instead of copy + pasting from my notes, I'm just gonna summarize;; GLORIUS, GLORIUS CODING! Over the last week, I noticed the lack of C# specifc support with BouncyCastle, the main library I've been using for the pqc-type funcitons I've been pulling. And, since I *don't* have the memory of a goldfish (lol), I remembered the *several* times I lost internet here, back at home. So, I reasoned- what if I need something not within a saved PDF, but need/want a reference to some code? Plus, since I wanted/needed some experience with the codebase itself, so I could attempt to wrap my head around how the algorithm works, since I'm reading their meanings & reasonings & processes alongside them... I went to my Java compiler and did a bunch of bouncyCastle Nonsense! MWAHAHAHAHA! NOW- *none* of this is setup for my project, specifically, BUT, since I was learning simultaneously with asecuritey's code & explanations (outdated in some segments, as they are), alongside several other sites I found while scronging around... I at least have *something!* Worst comes to worst, I spend a buttload of time attaching a Java-file to my project, in the world's largest showcase of hole-jank; but, it's a pitfall that's covered! MWAHAHAHAHAHA!	Incorporate Github Projects!!! Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it! OH GOD GITHUB UPDATE THE GITHUB YOU FOOOLLLL AAA FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION Keep coding!

3/27/2025 1:30AM to 1:45PM	0.25 hours	Supervisor	YES, AM, NOT PM; OH, I HAVE BECOME ERROR (but no, on a more serious note, I'm awake at this ungodly hour, because I was completing non-relevant work) Sent Mcneill the supervisor form & my timelogs, like we agreed I would, I suppose what is yesterday, now-- There's a bit of confusion surrounding that, I feel I should type out, actually; Basically, Mcneill has stated that, in previous semesters, *he's* been contacted by the 4900 team for the supervisor-reports & such; but when those have happened, they typically have already, by now. Additonally, he stated concern about the status of his institution-email; he said he might not be getting things through it;; So, we agreed that, come wednesday, if he hasn't received anything from them, *I* would send him the supervisor form from the blackboard, alongside my timelogs-- which I just did. MIND; I said that while being under the impression that the form was a him-only thing; but when I *literally just looked at it, right now*, it seems that, I too, complete some info. I dropped the ball, again. How, suprising.Regardless; my current gameplan is to email someone (AJ or Kathrine) in the morning, and hopefully recieve some help in/with the clarification onwards!Tally-ho, and all that; I'm gonna go to sleep, now.	Incorporate Github Projects!!! Email Kathrine, AJ, or both, in the morning (maybe just Kathrine, AJ's noted they don't perfer emails, they perfer in-person segments, in the past) Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it! OH GOD GITHUB UPDATE THE GITHUB YOU FOOOLLLL AAA FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION Keep coding!
3/27/2025 12:15PM to 12:30PM	0.25 hours	Other	Sent that email! Wooooooo.	Incorporate Github Projects!!! Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it! OH GOD GITHUB UPDATE THE GITHUB YOU FOOOLLLL AAA FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION Keep coding!

3/27/2025 12:45PM to 1:45PM	1 hours	Other	<p>While it took an uninstallation, reinstallation, and some software fixing; I finally updated the Github! Another thing off the list</p> <p>My major goal is to get everything NOT coding-based *out of the way* by Friday, minimum- so I CAN just get to coding!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>On github- update; - The Readme - REimplement a project manager- I KNOW we didn't like it when we tried like, a month back, but we GOTTA</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>
3/28/2025 10:00AM to 10:15AM	0.25 hours	Supervisor	<p>Sent Prof McNeill that confirmation email- about/with the details Kathrine sent me, about how all this works!</p>	<p>Incorporate Github Projects!!!</p> <p>Create custom-versions of AES & Kyber/Kyber-like-library, and test encrypt/decryptability against them; if I can decrypt using standard, a thing encrypted from my custom- and vise-verse (decrypt a standard encryption, etc); I've done it!</p> <p>On github- update; - The Readme - REimplement a project manager- I KNOW we didn't like it when we tried like, a month back, but we GOTTA</p> <p>FORMAT SOME WINDOWS FOR KEY EXCHANGE SIGNATURE AUTHENTICATION/VERIFICATION</p> <p>Keep coding!</p>

[illegible]

[illegible]

github link: https://github.com/AHMED-OMER-Program01/CISC_4900_PROJECT-

Week reflection:

Well- while I was happy with the coding progress I made this week;
A good example of nothing in this world being free is how I'm currently late (as far as I'm aware) for/of my uploading. I forgot- it was Eid, sue me.

THIS WEEK	
Types of hours;	SPENT;
supervisor discussions, emails:	0.5
Team discussions, emails:	0
Design:	0
Coding:	8.25
Testing & Debugging:	0
Research, training, learning:	0
Other:	5.75
TOTAL:	14.5
IN ABSOLUTE TOTAL:	
Types of hours;	SPENT;
supervisor discussions, emails:	2.75
Team discussions, emails:	0
Design:	2
Coding:	40.25
Testing & Debugging:	4.25
Research, training, learning:	27.75
Other:	41
TOTAL:	118