Project: How might we use tech to elevate (update/better) the educational system in large metropolitan cities in the northeast

Contact managers by: EMAIL

- Accenture Project Mentors:
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- Accenture HR CUNY Recruiting Contact:
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Videos or Template to showcase ish

- Budgeting and saving(Crystal)
 - Link that connect to excel or canva that can evenly calculate your spending and what saving (Me)
- Investing (Joshua)
 - Stock
 - Roth IRA
 - 401K
- Bank simple thing loan (jiaxin)
 - Debit credit card, loan
- Debt Management (Hernan)
 - How to decrease or lower debt

Team Emails:

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What we want done by Oct 29th

Hernan Carrillo - hernandavidcm@gmail.com- Learning Modules Mohina Abdullaeva - Mohinaa01@gmail.com - Pitch Deck Joshua Espinal - joshuaespinal077@gmail.com - Learning Modules Crystal You - crystalyou71@gmail.com - Pitch Deck

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 $Nabil\ Hasan\ -\ \underline{nabilhasan123456@gmail.com}\ -\ home\ page\ of\ website/potentially\ swiping\ feature$

Ruslan - RusZinFilay@gmail.com - Research/Financial Analysis/"Storytelling"

Tech Stack:

Framework: NextJS

Resources:

- 1) https://www.voutube.com/watch?v=Sklc_fQBmcs
- 2) https://www.youtube.com/watch?v=ff5cBkPg-bQ

Name: FUND-amental\$

Platform:

- Articles, short videos relating to financial literacy
- Modules within the website, different modules for each topic related to the issue.
- Survey; giving information to determine what they are interested in/what modules to work on
- Something like a budget planner if needed

Related Things:

- 1) https://financemission.ch/
- 2)

IMPORTANT DATES

- MOCK PRESENTATION OCT 29th

Meeting dates

- October 26/27 Presenting Together as a Team

Notes from the workshop:

Design Thinking

• Thinking from a design perspective. Allows for the creation of innovative solutions that people love.

Key Principles (of Design Thinking):

- Human-centered
- Creative and Playful
- Collaborative Prototype-Driven
- Prototype-Driven
- Iterative

Three Key Design Skills:

- Looking (curiosity, objectively, and empathy)
- Understanding (Critical thinking and problem framing)
- Making (imaginative and visual)
- Conduct interviews with friends, families or faculty members to gain insights about their educational experiences
- Conduct research to best practices and what different cities are doing
- Work with teams to further assess you top 3 ideas
- Refine your ideas and put it all together create a storyboard/presentation up to 7 slides depicting how your top idea will transform the educational experience
- Plan to present up to 10 mins with 5 additional mins for Q&A

Requirements:

- Cover Page
- Intro Page
- End with Contact Info

These 3 pages do NOT count in the total slide deck (5-7 slides without these pages)

- Good presentation: tailored to audience, information (data for example) related to the problem itself,
- How does it affect the decision they make and the **COST** for the company
- Be clear of the problem and the solution and WHY, why this one?

- Big impact, great scale

PROBLEMS BRAINSTORMING

- Zoning (limiting)
- Measuring Student Intellectually/new resources for students to learn
- Students at a stage where they are confused after high school or even college especially about career choice
 - Many students will end up with no jobs and probably (too late) to start the career
- COUNSELING SERVICES
- STAFFING, BUDGETING thinking about cutting operational costs through technology
- Career Readiness platforms for non target schools, the problem in lack of corporate attention to non targets
- LACK OF CAREER GUIDANCE IN HIGH SCHOOL, perhaps causing influx in lack of interest

Oct 2nd, meeting

- Website about basic financial literacy for college and high school students
 - Financial literacy is not consistently taught in low-income schools, though there has been a growing push for it in recent years. The availability and quality of financial education vary significantly based on school resources, local policies, and state mandates. Here are some key factors influencing the state of financial literacy in low-income schools:
 - ### 1. **Lack of Access and Resources**
 - **Funding Disparities**: Schools in low-income areas often have fewer resources for extracurricular programs, elective courses, or special initiatives like financial literacy. According to a 2019 report from **Next Gen Personal Finance (NGPF)**, only about **1 in 6 U.S. students** are required to take a personal finance course before graduating, and low-income schools are less likely to offer these courses.
 - **Teacher Preparedness**: Low-income schools may struggle to provide well-trained teachers who specialize in personal finance education. Many teachers feel unprepared to teach financial literacy due to a lack of formal training on the subject.

- ### 2. **State and District Mandates**
- **State Requirements**: Only a few states (such as Florida, Virginia, and New Jersey) have implemented comprehensive personal finance education mandates, ensuring all students, including those in low-income areas, receive some form of financial literacy instruction. In other states, it may be offered as part of economics or mathematics courses, but without a formal requirement, it's often skipped in underfunded schools.
- **Discrepancies in Course Offerings**: Low-income schools might prioritize core academic subjects (reading, math) over financial literacy due to pressure to meet standardized testing benchmarks, leaving little room for courses like personal finance.
- ### 3. **Nonprofits and Outside Programs**
- **Nonprofit Interventions**: Organizations like **Junior Achievement** and **NGPF** have stepped in to provide financial literacy programs in low-income schools. These programs offer resources, curriculum, and sometimes even teacher training to help fill gaps where school funding is lacking.
- **Partnerships with Financial Institutions**: Some schools, especially in low-income areas, partner with local financial institutions to bring financial literacy workshops or materials to students. However, these partnerships tend to be inconsistent and may not reach all students.
- ### 4. **Long-Term Impact and Challenges**
- **Economic Disparities**: A 2018 study by the **Brookings Institution** found that students from low-income backgrounds are less likely to be exposed to financial literacy education, exacerbating existing economic disparities. Without financial literacy skills, they are more vulnerable to debt, poor credit management, and financial instability as they transition into adulthood.
- **Cultural and Contextual Barriers**: In some low-income communities, financial literacy is not just about understanding financial concepts but also overcoming systemic barriers such as lack of access to banking, financial services, and credit. Schools in these areas may need to adapt financial literacy curricula to reflect the realities faced by students and their families.
- ### 5. **Recent Trends and Initiatives**
- **Growing Awareness**: In recent years, there has been a greater push for equitable access to financial literacy. States like **Georgia** and **Florida** have passed laws mandating personal finance education for all high school students, which could benefit students in low-income schools.
- **Technology-Based Solutions**: Some low-income schools are turning to
 edtech platforms to teach financial literacy. Interactive tools like online
 simulations and games can help make financial concepts more engaging, even in
 under-resourced schools.

- While financial literacy education is expanding, low-income schools still face significant challenges in providing consistent, high-quality financial education to all students. Many efforts to improve this are happening through outside organizations and state-level policy changes.

Financial Literacy:

- Income distribution, equity, and equality
- Decision Making (debt, opening up loans, credit cards)
- HS is a good middle ground
- Website/Application for Financial Literacy for HS/College students for the northeast, educating and implementing for the students
- Ties to NE due to cost of living, the type of people living in the NE (i.e, immigrants or refugees)
- Actual issue is tied to issues in the NE

Use GitHub to share resources and to divy up the work.

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- Quality of teaching of the teachers (rating or surveys)

Ted talks about shortage of teacher Report about uncertified Teachers

- Information (qualitative and quantitative)

- 60% of teachers within low poverty schools lacked experience
- 44% of public schools reported vacancy
- Teacher Shortages and Quality Concerns:
- National Center for Education Statistics (NCES) reported that in 2022, 44% of public schools had teaching vacancies, highlighting shortages as a major issue.
- A 2019 report from the Learning Policy Institute looked at high-poverty schools, finding that over 60% of teachers in these schools were less experienced, which affects teaching quality.
- A Bill & Melinda Gates Foundation 2019 study showed that 60% of teachers reported their professional development programs didn't help improve their teaching skills.
- The **National Center for Education Statistics (NCES)** conducted a 2016 study revealing that only **38% of teachers** felt feedback from evaluations led to changes in their teaching practices.
- Improving teacher effectiveness requires a multi-faceted approach, focusing on preparation, continuous professional development, mentorship, and supportive teaching environments. Here are some key strategies for helping teachers become better educators:

- Teaching Teachers to be Teachers

- ### 1. **Enhance Teacher Preparation Programs**
- **Rigorous Training Programs**: Teacher training programs should focus on both **theory** and **practice**. Training must cover pedagogy, subject matter expertise, and classroom management techniques. Programs should include extended clinical practice (e.g., **student teaching**) with real-time feedback.
- **Data-Informed Instruction**: Teaching candidates should learn to use
 data (student assessments, engagement metrics) to adjust instruction.
 Teaching how to analyze student performance and tailor lessons is crucial for improvement.
- ### 2. **Ongoing Professional Development**
- **Tailored Professional Development**: One-size-fits-all PD doesn't work. Teachers should receive **personalized professional development** based on their needs, such as differentiated instruction, new technologies, or advanced subject matter.
- **Collaborative Learning**: Professional learning communities (PLCs) allow teachers to work with peers to share best practices, solve problems, and reflect on their teaching. These peer groups can be vital in making professional development relevant and actionable.
- ### 3. **Coaching and Mentorship Programs**
- **Instructional Coaches**: Schools should provide experienced **instructional coaches** who observe classrooms, offer feedback, and co-teach

lessons. Research shows coaching can lead to significant improvements in teaching effectiveness.

- **Mentorship for New Teachers**: Pairing novice teachers with experienced mentors helps them navigate challenges. This relationship provides guidance on curriculum, classroom management, and strategies for student engagement.
- ### 4. **Encouraging Reflective Practice**
- **Self-Assessment and Reflection**: Teachers need to develop reflective habits, such as keeping a teaching journal, recording lessons, and watching their own teaching practices to identify areas for improvement.
- **Peer Observation**: Teachers can observe each other's classes to gain new strategies and receive constructive feedback. This promotes a culture of continuous learning and improvement.
- ### 5. **Fostering a Supportive School Culture**
- **Collaborative School Environments**: Schools should foster a culture of **collaboration** rather than isolation, where teachers share resources, plan lessons together, and engage in ongoing discussions about student learning.
- **Leadership Support**: Principals and school leaders play a key role in supporting teacher growth. Providing time for collaboration, access to resources, and emotional support can significantly enhance teacher performance.
- ### 6. **Leveraging Technology in Teaching**
- **Integrating EdTech Tools**: Teach educators how to effectively integrate **technology** (e.g., learning management systems, interactive platforms) into their instruction to engage students and track learning outcomes. Digital literacy is essential for modern educators.
- **Virtual Classrooms and Simulations**: Some teacher training programs now use **simulations** or virtual classrooms where educators can practice managing a classroom or teaching a concept in a low-stakes environment.
- ### 7. **Focusing on Student-Centered Learning**
- **Student Feedback**: Teachers should learn to incorporate **student feedback** on their learning preferences and experiences to tailor instruction. Empowering students to have a voice in the learning process can help teachers become more effective.
- **Differentiated Instruction**: Training teachers to provide differentiated instruction based on diverse student needs (learning styles, language levels, abilities) ensures all students are engaged and supported.

- ### 8. **Incorporating Research-Based Practices**

- **Use of Evidence-Based Strategies**: Teachers should be exposed to **research-based instructional practices** proven to be effective, such as cooperative learning, formative assessment, and active learning techniques.

- **Action Research**: Encouraging teachers to conduct **action research** in their own classrooms helps them identify what works and what doesn't in real-time, leading to more informed teaching decisions.
- These approaches can significantly improve teachers' instructional practices, foster a culture of continuous growth, and ultimately result in better student outcomes.

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- Guidance of qualifications for career wise for the major they pick (freshman or on the page of school)?
- parent-teacher communication platform

TARGET DEMOGRAPHIC (research on this which party to target)

- High School Students
- College Students

Financial Content

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- Link that connect to excel or canva that can evenly calculate your spending and what saving (Me)
- Investing
- Bank simple thing loan (Me)
- Debt ManagementJob

PRESENTATION CONTENT:

- What is the problem?
 - **High Debt Levels**: Young Americans, particularly in urban areas, are burdened with over \$1 trillion in debt, with many millennials living paycheck to paycheck. This financial strain highlights a lack of essential financial knowledge and skills necessary for effective money management.

- **Inequitable Access to Education**: Financial literacy education is often not prioritized in schools, resulting in only about 10% of 15-year-olds achieving maximum proficiency in financial concepts. Disparities exist among demographics, with Black/African American and Hispanic/Latino youth facing greater challenges.
- **Psychological Stress**: Low financial literacy correlates with increased psychological symptoms of financial stress. Young adults are 38% more likely to miss mortgage payments and 26% more likely to make hardship withdrawals from retirement accounts due to inadequate financial knowledge.
- **Financial Capability Index**: In 2023, U.S. adults answered only 48% of financial literacy questions correctly, indicating a widespread lack of understanding.
- Impact on Retirement Savings: Twelve percent of workers ceased saving for retirement due to inflation pressures; this figure was notably higher among Hispanic workers (24%) compared to their peers.
- Long-term Consequences: Individuals lacking financial literacy may face lifelong repercussions, including lower credit scores and increased vulnerability to predatory lending practices, which perpetuate cycles of poverty and economic insecurity.
- Citation Links:
 - https://unitedwaynca.org/blog/financial-literacy-for-youth/
 - https://sies.springeropen.com/articles/10.1186/s41937-019-0027-5
 - https://www.tiaa.org/public/institute/publication/2023/financial-well-being-and-literacy-in-a-high-inflation-environmen
- How is the problem of financial illiteracy being dealt with in high schools in the Northeast?

- New York

- Course Requirements: New York mandates a half-credit economics course for high school graduation, which includes some financial literacy content.
 However, the state received a grade of "D" for financial literacy instruction due to insufficient standalone courses and a lack of comprehensive K-12 standards.
- Legislative Efforts: In 2021, New York legislators proposed enhancements to consumer financial literacy but did not pass specific K-12 education mandates. This indicates a recognition of the issue but a lack of concrete action to improve financial literacy education at earlier grade levels.

- Connecticut

- Financial Literacy Innovation Program (FLIP): This program targets historically under-resourced high school students, focusing on personal finance basics, budgeting, and investing through interactive learning

- experiences. Schools participating in FLIP aim to empower students to make informed financial decisions and reduce future student loan debt.
- Curriculum Integration: Connecticut has seen initiatives that integrate financial literacy into existing coursework, although a standalone personal finance course is not universally required across all high schools.

- Massachusetts

- Current Standards: Massachusetts does not require a standalone personal finance course for graduation but has established financial literacy standards within existing curriculum frameworks. The state received a "C" for its efforts, indicating room for improvement.
- Pilot Programs: The Massachusetts Department of Education has implemented pilot programs in select high schools that have shown positive results in increasing students' financial literacy. However, these programs are not widespread enough to ensure all students receive adequate instruction.
- Recent Developments: Some districts, like Sharon Public Schools, have recently received grants to develop new finance courses, showing a growing recognition of the need for enhanced financial education at the high school level.

- Summary:

- There are some initiatives and programs that aim to improve financial literacy among high school students in the Northeast.
- Significant gaps in financial education still exist despite these efforts.
- New York and Massachusetts struggle with implementing comprehensive financial literacy requirements.
- Connecticut adopts a more proactive approach through targeted financial education programs.
- There is a clear need for standardized, standalone personal finance courses.

- Citation Links:

- https://www.thenationsreportcard.org/new-york
- https://diversity.business.uconn.edu/flip/
- https://ma.financialeducatorscouncil.org/massachusetts-financial-literacy-standards/
- https://www.northeastonsavingsbank.com/more-resources/news/financial-literacy-national-issue-requires-local-solutions
- https://www.nj.gov/education/standards/clicks/finlit.shtml
- Why do significant gaps in financial education in high schools in the Northeast still exist?

- Inequitable Access:

- Schools in lower-income areas often have fewer resources to implement robust financial literacy programs.
- Only 3.9% of students in schools where at least 75% are eligible for free or reduced-price lunch are required to take a semester-long personal finance course..

- Funding Challenges:

- Lawmakers pass requirements without allocating sufficient budget, leaving school districts to rely on community wealth to fund programs.
- The majority of instructors report having no designated budget for financial literacy classes.

- Demographic Disparities

- Studies show lower proficiency rates among Black, Hispanic/Latinx, Indigenous, and Pacific Islander students compared to white and Asian students.
- Gender disparities are also evident, with male students consistently scoring higher than female students.

- Curriculum and Resource Issues

- Many schools don't know where to place financial literacy in their curriculum or which department should be responsible.
- Without state-developed curricula, schools often rely on free, potentially biased materials from private sources.

- Teacher Training and Expertise

- Many educators lack the necessary training to effectively teach financial literacy:
- Teachers often need additional training to effectively teach personal finance courses.
- In some cases, teachers may have limited knowledge of personal finance themselves, potentially leading to ineffective or even counterproductive instruction.
- The absence of standardized curriculum and assessment tools makes it challenging to ensure all students receive adequate financial education.

- Citation Links:

- https://sjes.springeropen.com/articles/10.1186/s41937-019-0027-5
- https://unitedwaynca.org/blog/financial-literacy-for-youth/
- https://www.teachforamerica.org/stories/closing-financial-literacy-gap

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Oct 25th Discussion

- What is our solution? (A product? A service?)
 - A centralized interactive financial literacy educational platform that leverages:
 - artificial intelligence, short-video content:
 - How to incorporate A.I?
 - i.e: Chatbot for support, or make something from open source for financial content specifically
 - Use A.I for SOME part of the interactive modules (creating the scenarios for example)
 - Used to finding additional resources not founded by us.
 - Competitive, scenario-based games that enable students to apply fundamental financial concepts in realistic simulations.
 - Interactive Component Ideas(What games/interactive aspects can we include?):
 - Emphasize competition (Kahoot-like)
 - Investing Module: investing game (have a scenario, business simulation)
 - Debt Module: scenario where you tackle debt using methods, and having different outcomes.
 - (all modules can have something outlined above)
- Why is our solution the most effective/best?
 - Can be a well-defined year curriculum and standardized assessment at the end of the program (like regents/state examinations)
 - Centralized platform
 - Low-cost
 - Easy access
 - Allows for independent learning (actual curriculum with teacher, but will have asynchronous portions)
 - Exam at the end of the year (what happens if a student does not pass the exam?)
 - Can take again in the next grade/school year
 - What happens if a student does not pass the exam at the end of senior year?
- Substantiate your decisions, findings and research with data
- Relate to the audience (each slide)
- How much would it cost? (keep it low-cost)
 - Resources needed for the project:

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- Is it feasible?
- Seek guidance from the Accenture mentors (ask questions via email)

Presentation Outline:

- 1. Introduction: A "thesis" statement, outlining our project's goals and how we are planning to achieve them.
- 2. Attention Grabber (OMG Slide): Highlight a shocking statistic or fact, such as the increasing rates of poverty or the rising percentage of students falling into debt.
- 3. What are the reasons behind these problems? Funding problems, etc.
- 4. Solution Introduction: We are addressing this problem with our initiative, Fundamentals\$.
- 5. What is Fundamentals\$?: Fundamentals\$ is a financial literacy app designed to be integrated into the education system. It aims to empower not only students but also teachers and faculty to take control of their finances and plan for their future.
- 6. Why This Solution?: Fundamentals\$ is both a website and app. The idea was born from recognizing that financial literacy is often overlooked in high schools and colleges. Immigrants, in particular, face difficulties navigating simple financial tasks such as budgeting and understanding credit scores (talk about some of the content we came up with and anything additional if we think about it).
- 7. Cost and Feasibility: The project requires \$5 million to launch. It's an affordable investment for the Department of Education (DOE) as it has the potential to benefit people throughout the Northeast, with room for future expansion.

FUND-AMENTALS.pptx (main slide deck)

Updated Decks: <u>Updated Deck</u>

*Module Slides (the learning content for the website):

Investing Module (Joshua): Updated Slides (module)

- I will come up a way to explain the interactive process for my module
- I work a little on the main presentation (slight draft some part before mock presentation)

Debt Management Module (Hernan):

 $\frac{https://docs.google.com/presentation/d/1qEoZ8EU9QeKGJNLpy73KLUdJqkn8jENqwVuelg34II}{U/edit?usp=sharing}$