

NexGen Coding

(<https://www.nexgencoding.com>)

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Diamond Challenge Presentation (Concept ID: 7091)

by Vatsal Garg

Why did we emphasize coding?

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Mark Zuckerberg has been teaching his daughter to code since she was 3-years-old



Why?

“Priscilla Chan, Zuckerberg’s wife said that coding is an important skill for kids to learn nowadays and that they found it interesting and visually stimulating.”

‘Sometimes the daughters (4 and 5 year olds) will read books together. Sometimes they’ll code together,’ Chan said.

This is the future!!

My Personal Story

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Middle School

As a middle schooler, I found my passion in Computer Science

Learned through online courses

Ran my first coding camp in 8th grade



High School

Continued teaching for almost 3 years

Lightbulb moment: Why not bring people like me together?

Birth of NexGen Coding

Problem and Solution

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Both access and awareness are problems for students



Only 29%

of women comprise of STEM workforce today



More than 50%

of high schools don't teach computer science today

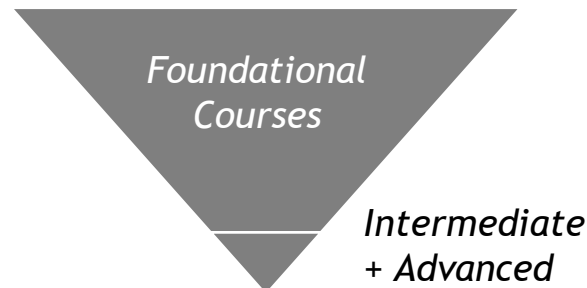


Only 37%%

of Hispanic parents feels CS education is needed

How to solve this problem

- ✓ Make it free
- ✓ Make it virtual
- ✓ Emphasis on **foundational courses**
- ✓ Focus on **elementary, and middle school students**



Who are these instructors and where to find them?

- ✓ Talented and driven high school students are instructors
- ✓ Do you know, just in US, if you get one student from each high school, you will have 27000 instructors

How to build an ecosystem of instructors and students?

- ✓ Power of internet and power of technology platform to bring instructors together to help the communities, that is [NexGen Coding](#)

We are determined to help millions across the globe

How will we scale and make it a reality?

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- Our Differentiators
- Why are instructors joining NexGen Coding?
- Tech Platform Roadmap
- Growth Projections
- Funding Requirements and Funding Sources
- Initial Response

Our Differentiators

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We uniquely addressed these 3 big hurdles for CS learning for building large communities of instructors and students and democratized the idea of volunteer teaching.

| | |
|----------------------------|--|
| 1) Made it completely free | No financial burden on underserved; eliminates the hesitation in minds of parents and students who are not aware of the benefits of this education |
| 2) Remote learning | Reduces time commitment from students, reduces safety concerns, and demands much less operational expenses |
| 3) Diversity of courses | Through the platform, we opened a world of possibility for courses by attracting talented instructors with diverse skillsets |

The technology used to build NexGen platform can onboard 10s of thousands and millions of students and equipped to serve globally.

Imagine yourself as a parent, you don't have to pay, your kid does not need to travel, and you are able to find a course you are interested in. **Do you have any reason not to sign up?**

A perspective based on initial experience

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- After connecting with 100s of parents so far, the most demand is for foundational courses like Scratch programming.
- The education system is lacking these foundational courses and private instructors do not find it worth their time.

NexGen coding model is very well positioned to run a large volume of foundational courses by our young and talented high school instructors.

Scalability of our approach

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| Key Ingredients | Why we believe NexGen will be successful |
|--|---|
| Demand (Students) | ✓ Education system does not address the CS education demand well; millions of students in need |
| Supply (Instructors) | ✓ Large pool of driven and bright high school students |
| Technology Platform | ✓ Automation is table stakes. Using advanced web development and other techniques for the platform. Softwares required for teaching are open source and free |
| Funding need and fulfilment | <ul style="list-style-type: none">✓ No fees for students and no payment for instructors (we don't need instructors who are in for money).✓ Being remote demands lower investment. Securing free services using our non-profit status✓ Largely funded by donations and will be attempting for Fed/Govt Grants. |
| Quality Maintenance | ✓ Will build reporting tool on course, instructor and tech experience feedback |
| Grit and Persistence of the Management | ✓ NexGen team is determined to move the needle day-by-day and address this gap |

Why are instructors joining NexGen Coding?

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Key reasons

- ✓ Opportunity to teach at a young age
- ✓ A big boost in self-confidence
- ✓ Desire to get better on a given topic
- ✓ A credential for your college application
- ✓ More importantly, like my team, **these youngsters truly want to give back to the society** and are not driven by small amounts of money!

Tech Platform Roadmap

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This is just the beginning, we have our work cut out for next 12-24 months to significantly enhance the platform.

3 Pillars

New Engagement Features

- Resources page - interesting articles on different topics
- Online chat available for every course
- Newsletter and Email Campaigns
- Polling to learn what courses garner the most demand

Site Enhancement

- Search Engine optimization
- Interviews with leaders in education
- Equip instructors to add courses with minimal effort
- Able to filter courses by topics, by starting month, etc.
- Partnership page

Course Execution

- Sharepoint for instructors and students to share files
- Students Performance Evaluation

NexGen team conceptualized the idea, designed the platform end to end and hired external web developer to build the platform. We will continue to seek professional support for software development, while continuing to enhance architecture and the features of the platform.

5 & 10 Years Growth Projections and Rationale

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We expect to grow exponentially year-over-year and run 5000+ courses in 10 year time frame and educating 100k+ students annually

Our Targets

| Metric | 2022 | | | | 2023 | 2024 | 2025 | 2026 (5-year mark) | ... | 2031 (10-year mark) |
|-------------------------------|---|------|------|------|--|------|--|-----------------------|-----|--|
| | Q1 | Q2 | Q3 | Q4 | | | | | | |
| # Countries | 2 | 2 | 2 | 2 | 3+ | 5+ | 8+ | 12+ | | 30+ |
| # Instructors | 7 | 13 | 20 | 30 | 60+ | 150+ | 400+ | 1200+ | | 4000+ |
| # Courses | 6 | 8 | 10 | 15 | 80+ | 200+ | 500+ | 1500+ | | 5000+ |
| # Partnerships w/ Non-Profits | 2 | 3 | 4 | 5 | 10 | 20 | 40 | 60 | | 100+ |
| # Students | 100+ | 150+ | 200+ | 300+ | 2k+ | 4k+ | 10k+ | 30k+ | | 100K+ |
| Notes | <ul style="list-style-type: none">✓ Millburn High school principal endorsed us✓ Partnered with 2 non-profits already✓ Influx of instructors✓ Big push for principles' endorsement from other high schools across the country | | | | <ul style="list-style-type: none">✓ Platform improvement✓ Use of Social Media and local media | | <ul style="list-style-type: none">✓ Massive investment in the platform, \$50K+ to make the experience seamless for both instructors and students✓ Continue to promote through local and national media and social media channels (facebook, Instagram, etc.)✓ Continue to reach thousands of schools in the country✓ By the end of 5 year mark, we will largely be a household name | | | <ul style="list-style-type: none">✓ Large pool of instructor base - even if we get 1 instructor from half of the high schools in US, we will have more than 13,000 instructors |

Funding Requirements

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Our business model is relatively lean, and our funding needs will only be \$150K+ annually by year 5 and over \$250k+ by year 10

| Key Cost Item | Cost Projections | | | | | | |
|--|------------------|---------------|---------------|----------------|---|-----|---------------------|
| | 2022 | 2023 | 2024 | 2025 | 2026 (5-year mark) | ... | 2031 (10-year mark) |
| Platform Dev (IT, creative) <i>using paid professionals in India currently</i> | \$5k+ | \$40k+ | \$60k+ | \$80k+ | \$100k+ (maintenance + enhancements) | | \$100k+ |
| Marketing Budget <i>(+media coverage)</i> | \$0 | \$1k+ | \$3k+ | \$5k+ | \$10k+ | | \$40k+ |
| Legal Support <i>(largely volunteering and use services like LegalZoom)</i> | <\$1K | \$5k+ | \$10k+ | \$15k+ | \$20k+ | | \$50k+ |
| Accounting support <i>(volunteering based with low expense)</i> | <\$1K | \$2k+ | \$5k+ | \$10k+ | \$20k+ | | \$30k+ |
| Google Meet/Zoom + free open source softwares <i>(e.g., Google supports non-profits)</i> | \$0 | \$0 | \$0 | \$0 | \$0 | | \$0 |
| Total Annual Cost | \$6k+ | \$50k+ | \$80k+ | \$120k+ | \$150k+ | | \$250k+ |

Refer to the next slide for funding sources

Funding Source

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We offer no-fee services, we will be collecting funds largely through donations and we are confident about that. As per our projections, we will easily beat the funding need.

| Funding Source | Funding Projections | | | | | | |
|--|---|---|---|----------------|--------------------|-----|---|
| | 2022 | 2023 | 2024 | 2025 | 2026 (5-year mark) | ... | 2031 (10-year mark) |
| Donations: Private Organizations | \$0 | \$25k+ | \$40k+ | \$70k+ | \$100k+ | | \$200k+ |
| Donations: Individuals <i>(gofundme, paypal charity, friends, family, etc.)</i> | \$5k+ | \$20k+ | \$40k+ | \$60k+ | \$80k+ | | \$150k+ |
| Donation: Parents of Students <i>(conservative - <\$2 donations per student)</i> | \$3k+ | \$10k+ | \$20k+ | \$30k+ | \$50k+ | | \$80k+ |
| Fundraising Events | \$0 | \$5k+ | \$10k+ | \$20k+ | \$40k+ | | \$100k+ |
| Federal/Govt Grant | \$0 | \$0 | \$10k+ | \$20k+ | \$30k+ | | \$50k+ |
| Total Funding | \$8k+ | \$60k+ | \$120k+ | \$180k+ | \$250k+ | | \$500k+ |
| Total Annual Cost | \$6k+ | \$50k+ | \$80k+ | \$120k+ | \$150k+ | | \$250k+ |
| Notes | <ul style="list-style-type: none"> ✓ Will soon start receiving donations - waiting on Letter of Determination from IRS | <ul style="list-style-type: none"> ✓ Identified contacts in a few organizations ✓ Reachout through the large network of parents and instructors | <ul style="list-style-type: none"> ✓ Expand list of organizations ✓ Tap into Federal Grant ✓ International expansion | | | | <ul style="list-style-type: none"> ✓ Significant international expansion |

NexGen is getting recognized and building a solid foundation

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- ✓ Promoted by Millburn High School principal
- ✓ Collegewise recognition
- ✓ Partnership with 2 non-profits



PSA: NextGen Coding ▸ Inbox ×

William Miron <noreply@millburn.org> [Unsubscribe](#)
to me ▾

Mon, Jan 31, 7:10 AM (12 days ago) ☆ ↶ ⋮

Public Service Announcement

Hi,

My name is Vatsal Garg and I am currently a junior at Millburn High School. I have been running coding camps for the past 3 years and have formalized my efforts into a non-profit called NexGen Coding. This non-profit aims to teach computer science and have a vast impact through a network of remote instructors. We are completely remote and free and currently have instructors in New Jersey, Virginia, North Carolina, India, and are looking to expand.

As of right now, NexGen is launching 5 courses run by 8 instructors starting this month and is also in the process of partnering with other nonprofits.

Right now, NexGen is looking to offer more diverse courses so if anyone is passionate about community service, would love to teach for free, and needs volunteer hours for their resume, please visit <https://nexgencoding.com> and apply to be an instructor.

Thanks,

Vatsal Garg



Thank you

NexGen Coding Mission Statement

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Our mission is to provide a **free**, world-class **diverse computer science** education **remotely** for anyone across the globe by connecting instructors with passion for community service with eager students through our platform. We strive to **engage young women** and students from other **underrepresented groups** in this journey and empower them to be the creators of tomorrow.



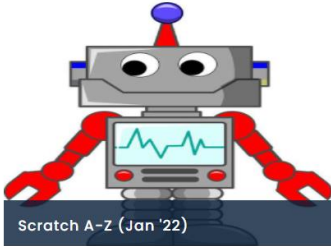
Sample of Courses

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ONGOING EVENTS



Introduction to Python (Jan '22)



Scratch A-Z (Jan '22)



Java for Everyone (Jan '22)



Excel at Excel - India (Feb '22)

UPCOMING EVENTS



App Development (Mar '22)



Java Algorithms (Mar '22)



Python Intermediate (Mar '22)



Java Object Oriented Programming (Apr '22)



Introduction to Python (Apr '22)



TinkerCAD (Apr '22)



AI/Machine Learning (May '22)

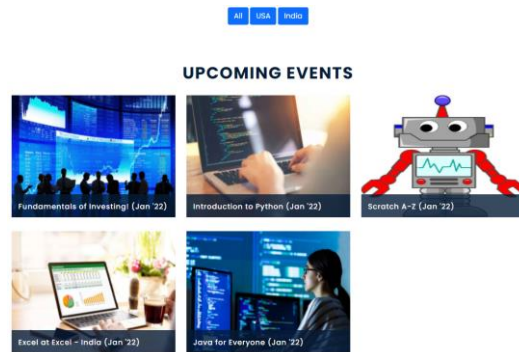


Java A-Z - India (Jun '22)

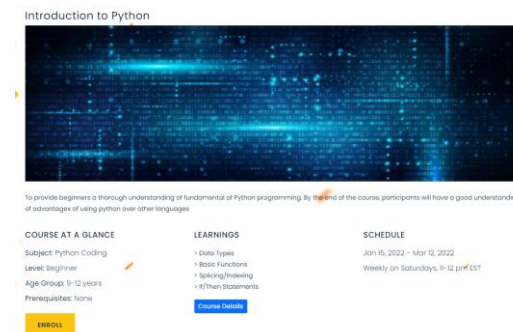
Platform Demo - Course Signup

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1. Browse Upcoming Courses



2. Review Course Details



4. Start Learning



3. Enroll

ENROLL WITH US

FILL THE REGISTRATION FORM BELOW

I hope you are just as excited about learning as we are about teaching computer science. If any questions arise do not hesitate to contact us.

Course
Introduction to Python

Parent/Guardian Name*
Enter Full Name

Parent Email Address*
Enter Email Address

Parent Phone Number
Enter Phone Number

Student Name*
Enter Full Name

Student Identifier As...
Male

Student Email
Enter Email

Student School Name*
Enter School Name

Grade*
Enter Grade

Current State - Looks very promising!

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Platform Build

- ✓ Online platform accessible to everyone globally
- ✓ Sign-ups for instructors and students online
- ✓ List of upcoming courses by geography
- ✓ Course details

Execution

- ✓ 13 instructors across US and India
- ✓ 1 course completed, 4 ongoing and 8 more to start (3 in India)
- ✓ Promoted by Millburn High School principal
- ✓ Collegewise national recognition
- ✓ Partnership with 2 non-profits
- ✓ Students signing up from multiple states (6+ so far)