



## Project Name: Rehnuma Learn's

This project is my dream project where I want to teach complex science topics in a playful way, using storytelling techniques. I am creating comic series that will focus on different topics that sound complex for people with anxiety and learning disabilities.





Project Name:	Rehnuma Learn's
Leader:	Rehnuma Taskin
Members:	Solo Project
Budget:	\$ 100- \$1000 (Depending on the website-building process)
Timeline:	26/04/2023 - 03/05/2023

## Project Details

### Background

"Robots and the creative process" is one of my favorite classes where I am able to think about what I like and what I want to do. My final project is a dream project for me where I am trying to create more engaging content, stimulation, and resources for people with learning disabilities. My main focus is on complex topics of STEM, personally, I am more driven toward Physics and I am building up content for particle physics. While growing up, I didn't get enough resources to study the topics and had to hear that girls are not for STEM. Now I am trying to reduce the gender gap we have in STEM and make STEM accessible as well as easier for people from all spheres of the world.

### Goals

- Building up resources for people with learning disabilities.
- Making the complex concepts of Physics easier for others.
- Creating comic series that can connect to the kids as well as to the adults.
- Encouraging people to study STEM and utilize the benefits of AI in visual learning.

## Materials Used To Build The Project

- **Google Sites** to build the website
- **Pixton** to create comics
- **Adobe Illustrator** to draw comic scenes
- **Artbreeder** to use AI to generate visual graphics from prompts
- **PhET Interactive Simulations** to integrate stimulations into my website
- **Lumen5** and **Renderforest** for the draft introduction video.

More than 10 Research papers and articles, documentaries to develop content that works for people with learning disabilities.

## Summary of steps I had to follow to build the website

1. Compiling all the best resources I have for particle physics.
2. As I was lack in finance, I had to search for free website developing sites and free AI sites that can help to build the content.
3. Creating an intro video as draft content to see how it works.
4. Building a storyline that is acceptable and relatable to people with disabilities.
5. Creating graphics according to the storyline.
6. Creating a website to publish the content.
7. Integrating Interactive Stimulations and adding more features to make it easy and user-friendly.
8. Publishing the website.

## The questions that led me to the project

- What do I want to do for people?
- How can I create an impact in the society?
- How can I engage more with STEM?
- I love Art but while doing Electrical Engineering I am not getting enough time to explore art, what can I do to make a bridge between them?
- A lot of kids in Bangladesh are interested in STEM, but they don't have enough resources to learn, how can I reach out to them easily?
- I have worked with people who have learning disabilities, how can I improve their learning resources and help them?

## Potential Obstacles

- ☐ Before building any content I had to study the topic first which was time-consuming.
- ☐ Needed to make a sophisticated storyline that can be relatable to people from different perspectives.
- ☐ Making the content and maintaining the website alone is time-consuming and tough
- ☐ AI products can not make comics properly. Had to recreate the comics.
- ☐ Lack of manpower. I was working alone on this and had to maintain all the parts.

- ☐ Lack of finance. To host a website properly and to make it interactive I need to buy space. Also, if I want to create comics using AI, I need to buy that product too.

## Lesson Learned

- To build a successful project, keeping track of time is extremely important.
- Try to read from books and resource papers rather than checking from Google cause sometimes information related to complex science can be misleading. If one uses ChatGPT or any other AI, one should ask for the citation or references of the answers getting from AI.
- Skills will develop with time and effort, so while developing the skill, one should try to explore other options one has to get the desired work done.

## Future Steps

- Need to create the storyline and comics.
- Reaching out to people with learning disabilities and taking their feedback.
- Building up an interactive website that can help people to learn their desired topics easily.
- Learning how to use AI and simulations inside a website.
- Learning how can I accommodate a maximum range of people with different unique needs on my website.
- Publishing and doing marketing for the website.

In conclusion, this project gave me the motivation to work for my dreams and it worked as my break from the robotic undergrad life. While drawing the comics, and building up the characters and stories, I felt an adrenaline rush that kept me inspired to do more. Hope, I will continue to work on this and create a real impact on the education and learning process.