

STEM Inclusivity Lab

Sofija Jancheska, Mariam Elgamal, Tina Krulec

Prof. Mai Oudah

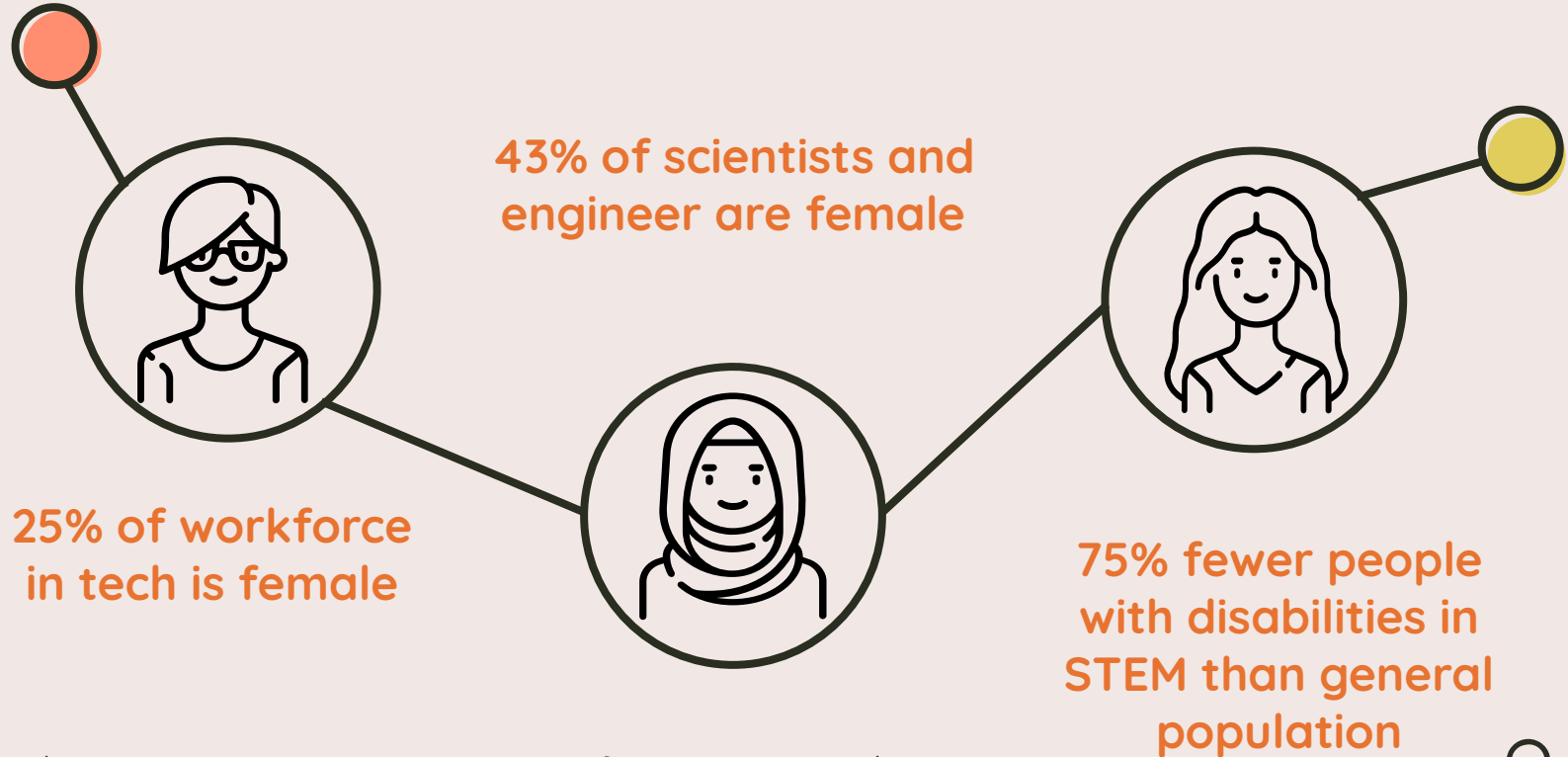
December 2020

Sofija Jancheska, Mariam Elgamal, Tina Krulec

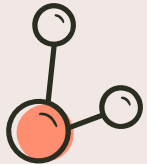
Prof. Mai Oudah

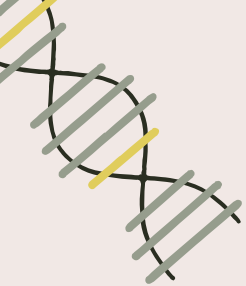
December 2020

Problem



These percentages are A LOT worse for minorities, such as people of color, LGBTQ+, ethnic minorities and others.





Causes



Social Stigma



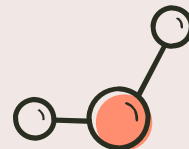
Lack of interest & confidence



Implicit and explicit biases



STEM Culture & Welfare policies

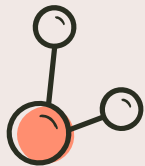




Solution

STEM Inclusivity lab was created to support the active engagement of marginalized groups in STEM by providing open-source documentation for educators and youth leaders who aim to create inclusive spaces for these groups to get excited about STEM.





Goals



EMPOWERMENT



COMMUNITY



RESOURCES

2000 individuals

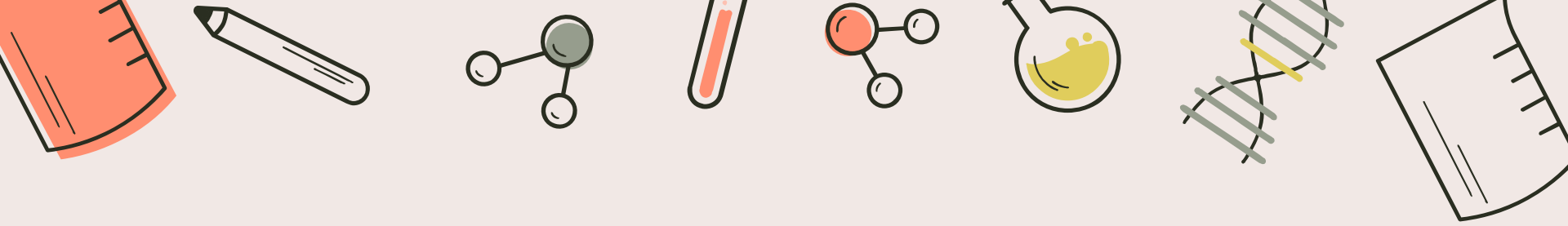
--
2 months

3 clubs

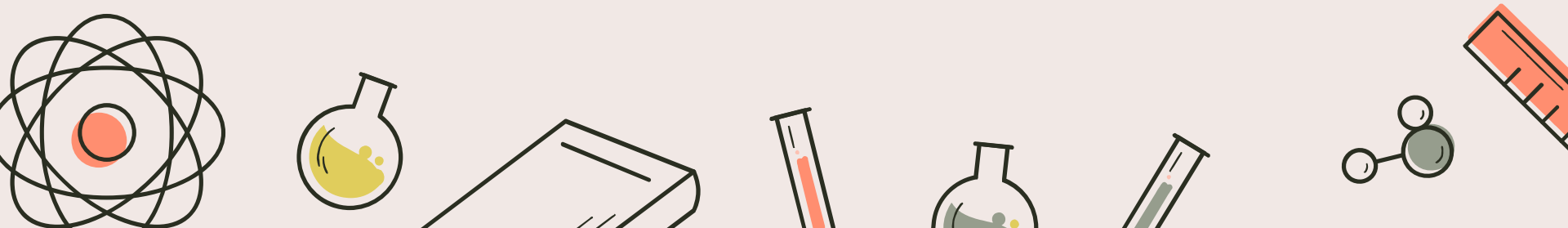
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6 months

2 partners

--
1 year



Requirement Gathering & Project Planning



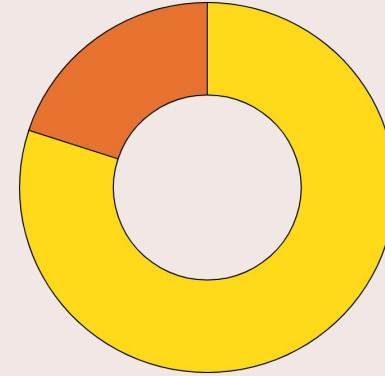
Requirements Survey



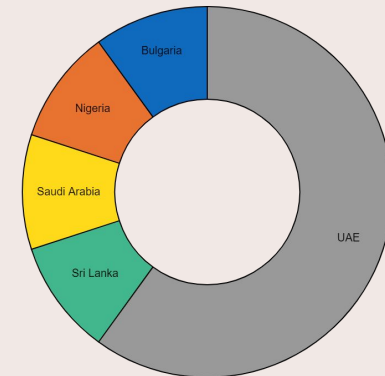
100% SHARE RESOURCES

100% DOWNLOAD

80% FORUM



8/10 participants identified as womxn in STEM.



6/10 participants from UAE, overall 5 countries represented.



Software Requirements



- ❑ **Search** document by category and string input.
- ❑ **Download** document.
- ❑ **Upload and modify** document, with certain need for administrative approval.
- ❑ **Multilingual interface** - English, Arabic, Slovenian and Turkish
- ❑ English documentation.
- ❑ **Forum** function to encourage participation, with certain need for administrative approval.
- ❑ **Admin and User** user cases
- ❑ **Feedback collection.**

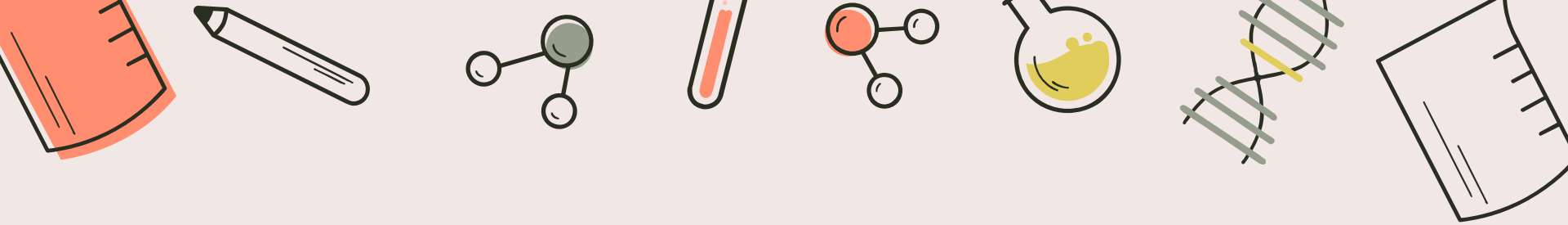


Process Model

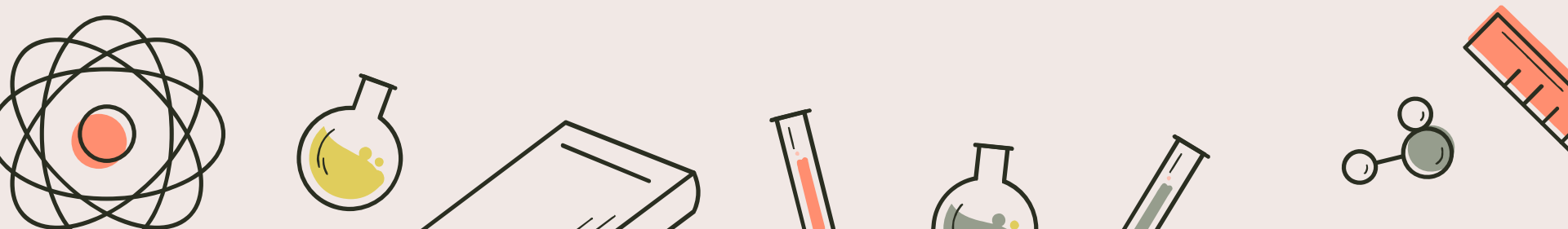


Spiral with Agile

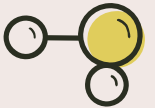




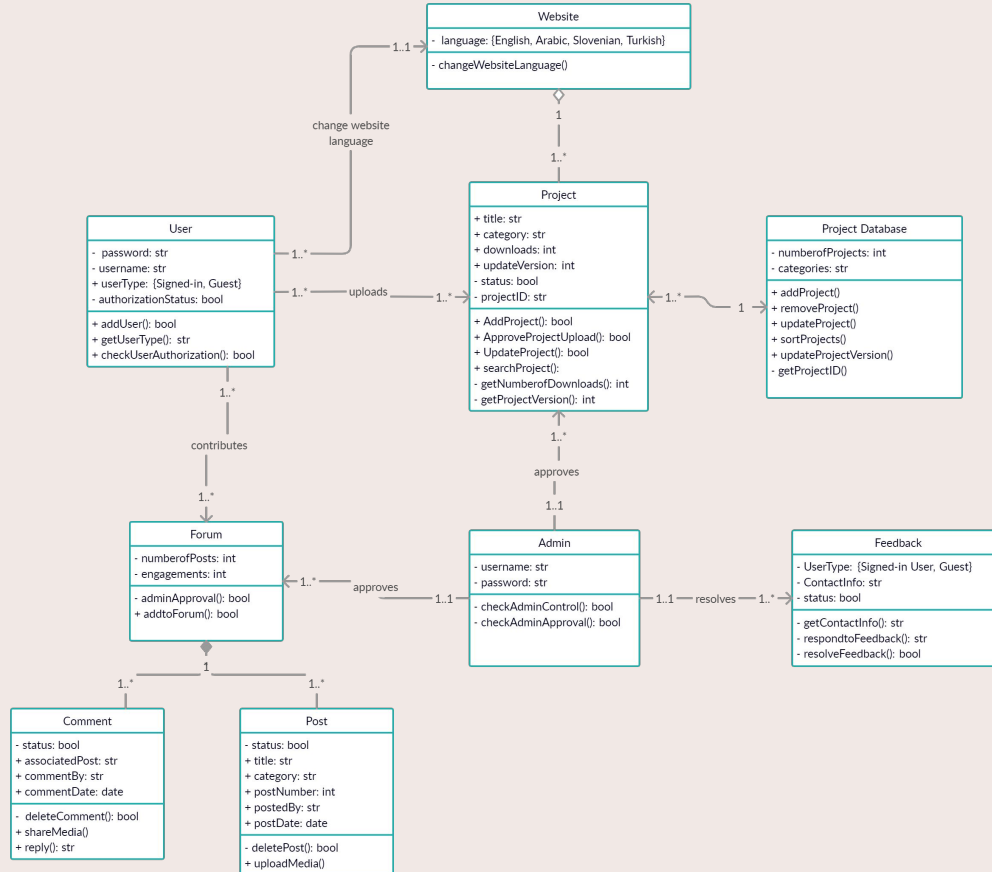
Modelling



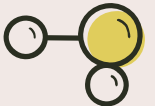
Use Case Diagram

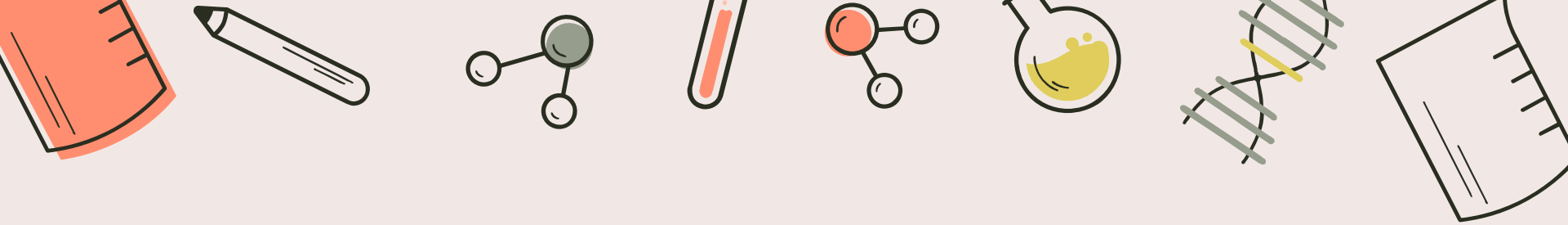


Class Diagram

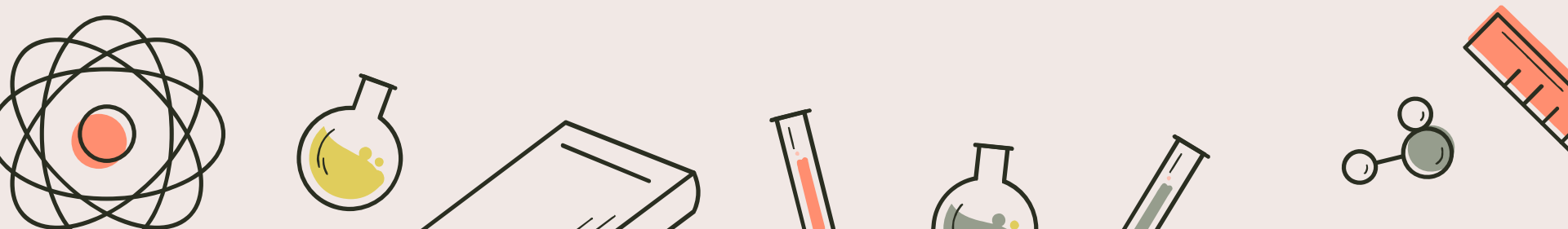


- High Cohesion
- Low Coupling
- Creational Design Patterns





Implementation: Report



Technology



Server & Hosting

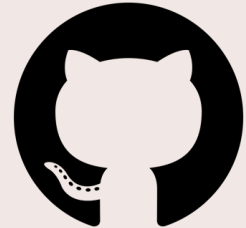
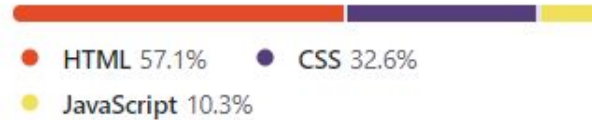
- ❑ GitHub pages for hosting
- ❑ Firebase for cloud database to store document



Front End

- ❑ HTML/CSS
- ❑ Bootstrap
- ❑ JavaScript

Languages





🏠 Project Overview



Develop

👤 Authentication

🔥 Cloud Firestore

📄 Realtime Database

📁 Storage

🌐 Hosting

⚡ Functions

🤖 Machine Learning

Quality

Crashlytics, Performance, Test La...

SEngin ▾

Go to docs



Storage

Files




Rules

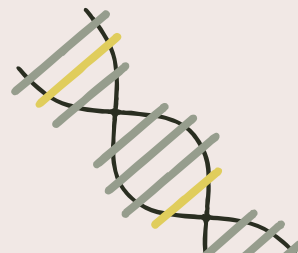
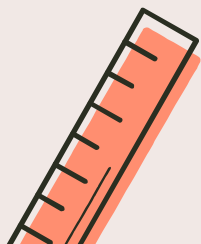
Usage

🔗 gs://sengin-db101.appspot.com > documents

📁 Upload file



<input type="checkbox"/>	Name	Size	Type	Last modified
<input type="checkbox"/>	 gap.png	10.43 KB	image/png	Dec 6, 2020
<input type="checkbox"/>	 weSTEM Eboard Applications _ Spring 2021.pdf	124.86 KB	application/pdf	Dec 9, 2020
<input type="checkbox"/>	 western course advising.jpg	106.16 KB	image/jpeg	Dec 6, 2020



Overview



Website
framework



Visual
Identity



Upload



Download



Search

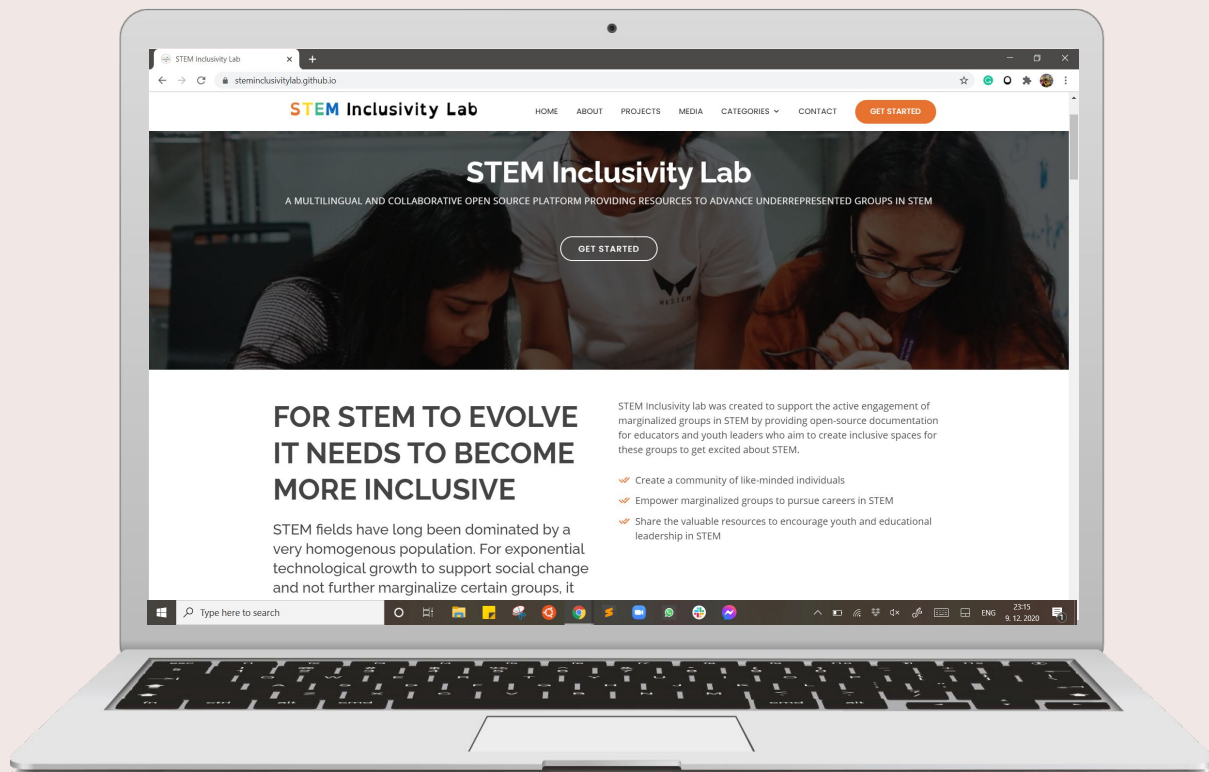
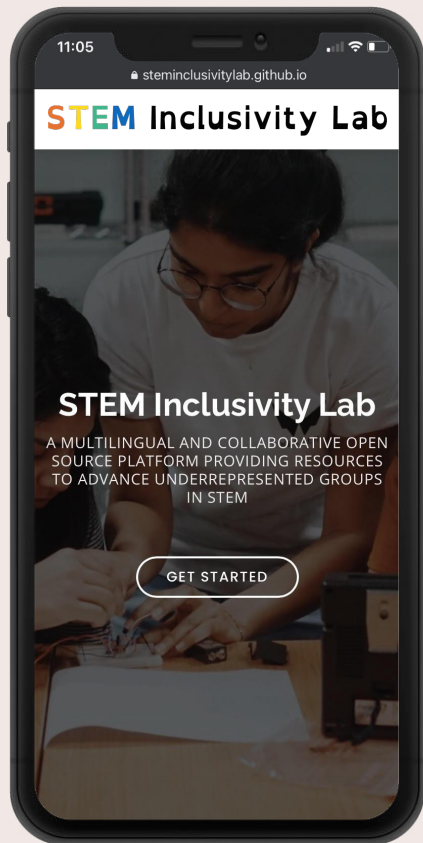


Additional

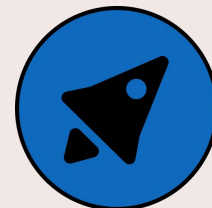
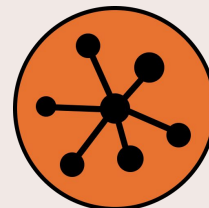
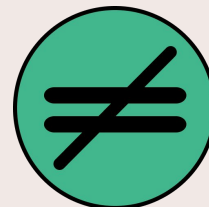
- ❑ **Mailchimp and Google Analytics** (through Firebase) to collect data on users.
- ❑ **Sign up for newsletter** through Mailchimp.
- ❑ **Media section** showcasing some of the more well-known programs from weSTEM that supports search by category.
- ❑ **Testimonials** section with displayed feedback from users.



Support for different devices



Visual Identity



Main Color

Orange (E87331)

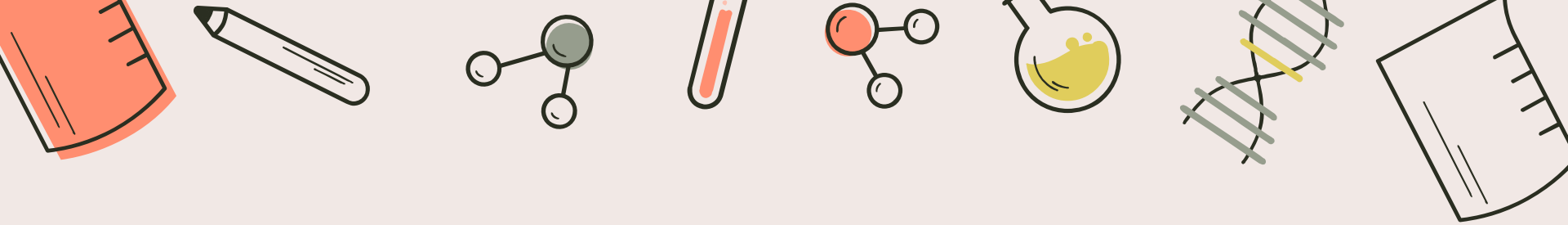
Logo Font

OpenDyslexic

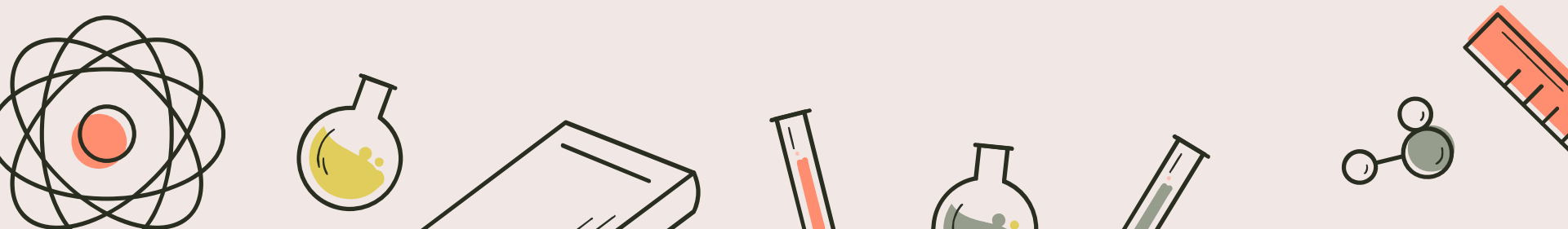
Supporting Colors

Yellow (FFDA1A), green (42B78D) and blue (0F6ABE).





Implementation: Demo



STEM Inclusivity Lab

HOME

ABOUT

PROJECTS

MEDIA

CATEGORIES

CONTACT

GET STARTED



Technochauvinism and Gender Bias in Tech

Hosted by weSTEM at NYU, Stemist and WnC at NYU, and weSTEM at NYUAD. Register via Zoom.

Nov 11
@9am ET

MENTORSHIP PROGRAM

Applications for the weSTEM mentorship program are open both for mentors and mentees!

DEADLINE:
NOVEMBER 12TH

Mentees: first year students
Mentors: 3rd & 4th year students

Careers and Graduate Schools in Psychology and Neuroscience

Join us for a virtual panel on Monday, October 26 from 4-5PM GST via Zoom

PANELISTS:

Kartik Sreenivasan
Assistant Professor of Psychology
Antje von Suchodoletz
Assistant Professor of Psychology
Shammy Altaf
Psychology Department Lab Assistant
Simran Motiani
Psychology alumna pursuing a Masters Degree at Oxford University



ALUM CHAT

LAMA AHMAD

September 28 at 6pm GST

Presented by the Social Sciences Academic Committee and weSTEM



WESTEM PRESENTS

PICTURE A SCIENTIST FILM SCREENING

NOV 20 12PM - NOV 23 12 PM

OPEN TO ALL COMMUNITY MEMBERS - STUDENTS, ALUM FACULTY AND STAFF. RESERVE YOUR SEAT NOW!



STEM PRESENTS

Alum Chat:

ami Gjorgjieva

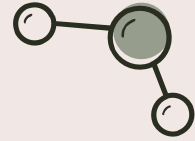
NOVEMBER 18TH, 7PM GST



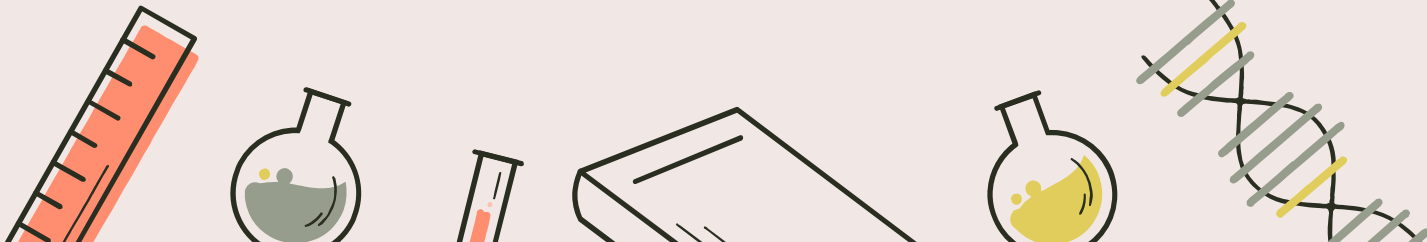
clideo.com

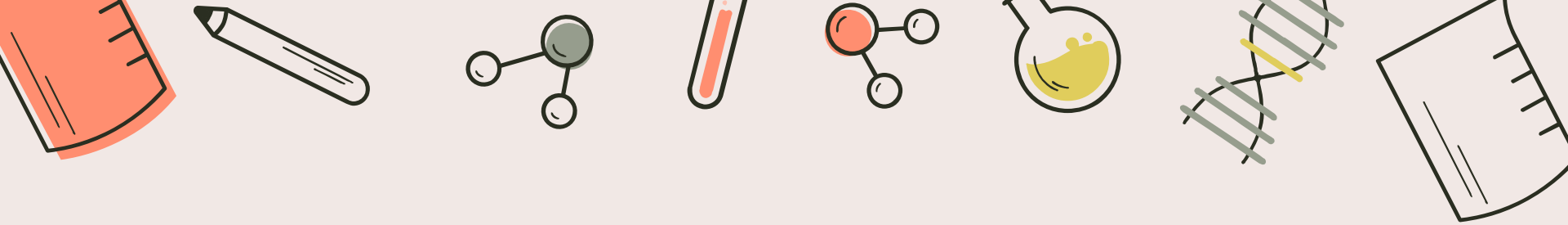
A decorative border of various science-related icons surrounds the central text. The top border includes a red ruler, a pencil, a molecular structure, a test tube with red liquid, another molecular structure, a round-bottom flask with yellow liquid, a DNA double helix, and a white ruler. The bottom border features an atomic model, a round-bottom flask with yellow liquid, a white rectangular object, a test tube with red liquid, a round-bottom flask with green liquid, another test tube with green liquid, a molecular structure, and a red ruler.

Implementation: Future



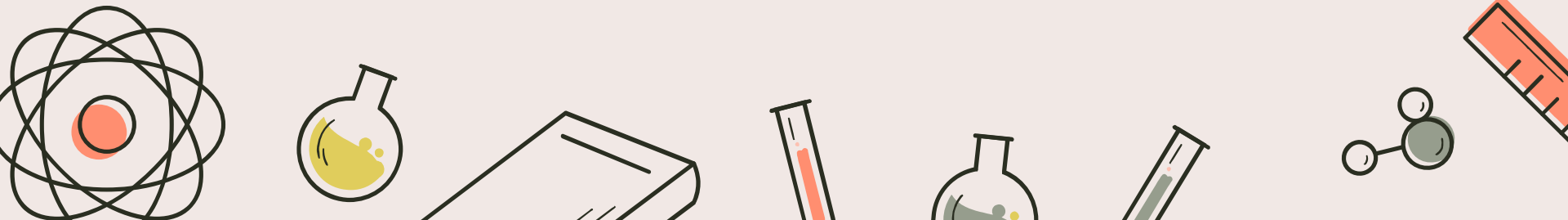
- ❑ Register and log-in.
- ❑ Improve upload and download.
- ❑ Modify.
- ❑ Make a step in the upload process that allows the admin to check the file.
- ❑ Admin and User user cases.
- ❑ Forum
- ❑ Unify the visual identity across the website and supportive documentation, providing everything in a mix of accessible fonts.





Q&A

Ask away!



The slide features a light gray background with various science-themed icons scattered around the edges. On the left, there is a DNA double helix, a round-bottom flask with yellow liquid, a test tube with red liquid, a graduated cylinder with red liquid, and a molecular model with a yellow sphere. On the right, there is a large atomic model with a red nucleus and black orbits, a test tube with red liquid, a round-bottom flask with yellow liquid, a molecular model with a red sphere, and a test tube with green liquid. In the center, the text "THANK YOU!" is written in a large, bold, orange font.

THANK YOU!

CREDITS: This presentation template was created
by **Slidesgo**, including icons by **Flaticon**, and
infographics & images by **Freepik**.