

SOFTWARE
DEVELOPMENT

CLOUD
COMPUTING

CYBERSECURITY

DATA SCIENCE

CYBERSECURITY

UI/UX DESIGN

UI/UX DESIGN

NETWORK
ENGINEERING

IT PROJECT
MANAGEMENT

IBM SkillsBuild Project

FutureMap: Your personalized roadmap to success

Presented By:

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Computer Science and Information Technology

Outline:

- Problem Statement
- Technology used
- Wow factor
- End users
- Result
- Conclusion
- Git-hub Link
- Future scope
- IBM Certifications



Problem Statement:

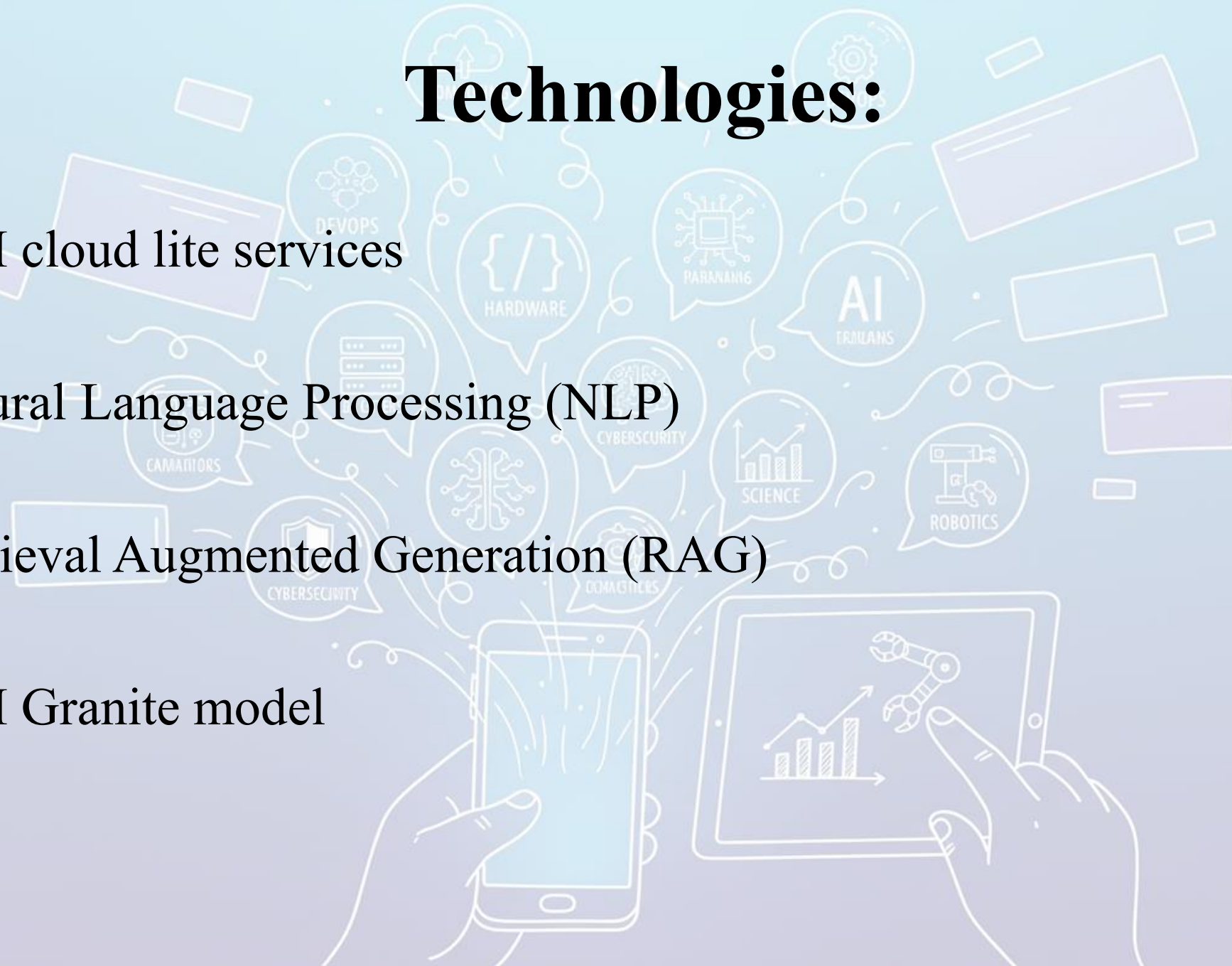
Students are **overwhelmed** by the sheer number of online courses and **lack the personalized guidance** needed to choose the right learning path. Without clear direction, they often waste time, lose motivation, or **fail to reach their long-term goals**.

Proposed Solution:

FutureMap solves this by acting as an **Agentic AI coach** that **understands each student's interests** and skill level, then builds a personalized, evolving course roadmap that adapts as they learn — **making education efficient, focused, and goal-driven**

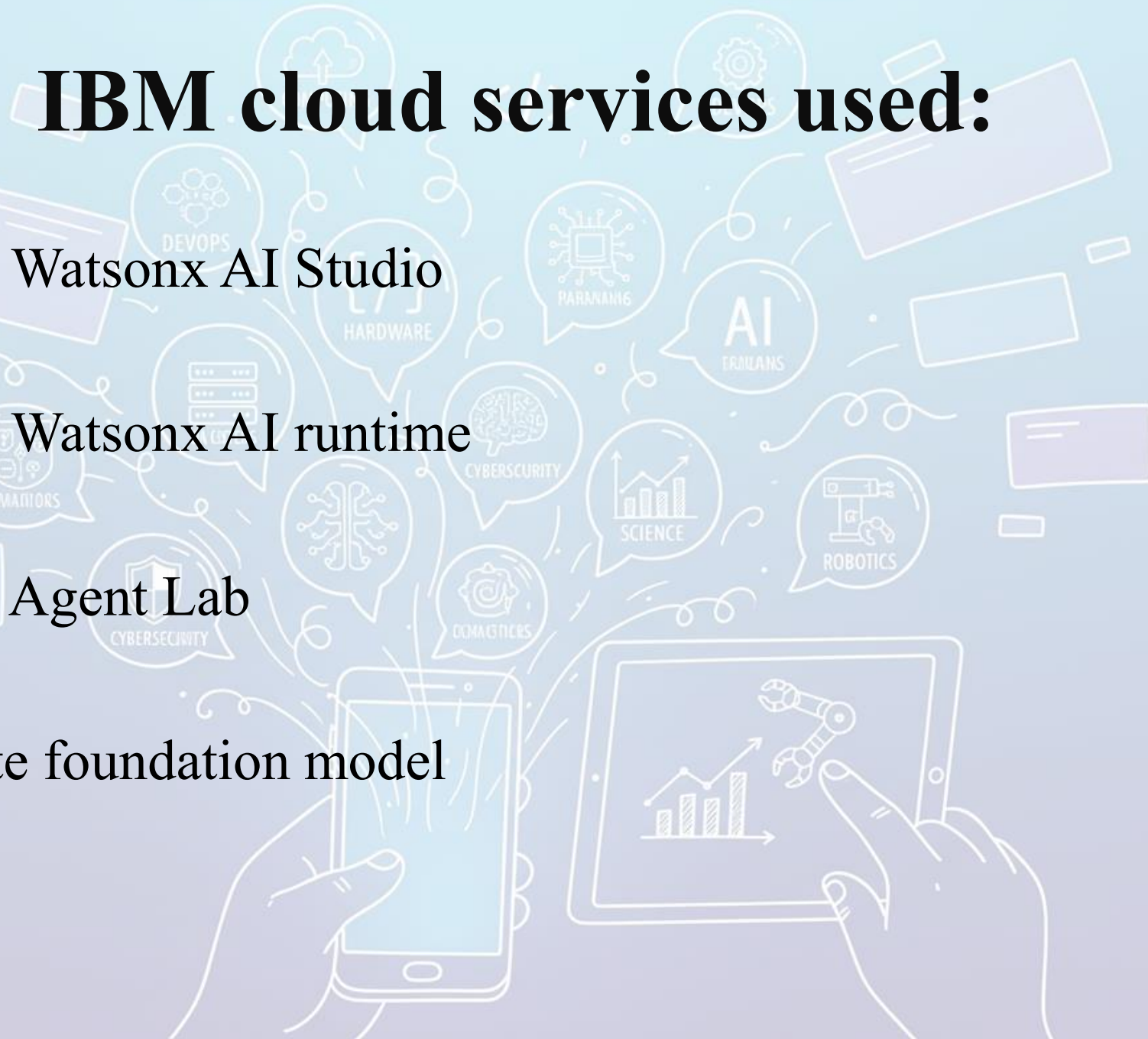
Technologies:

- IBM cloud lite services
- Natural Language Processing (NLP)
- Retrieval Augmented Generation (RAG)
- IBM Granite model

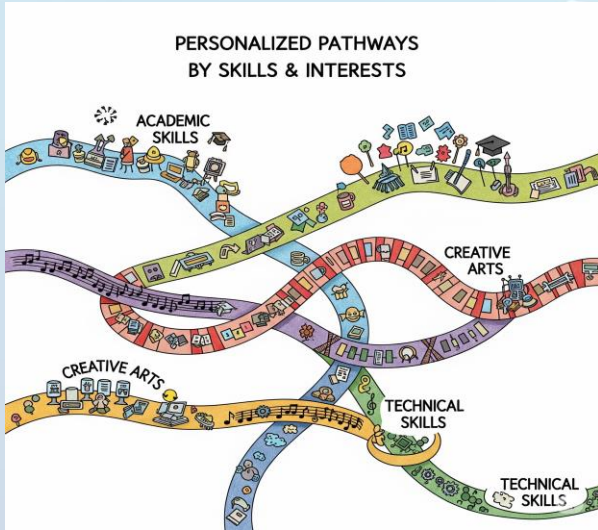


IBM cloud services used:

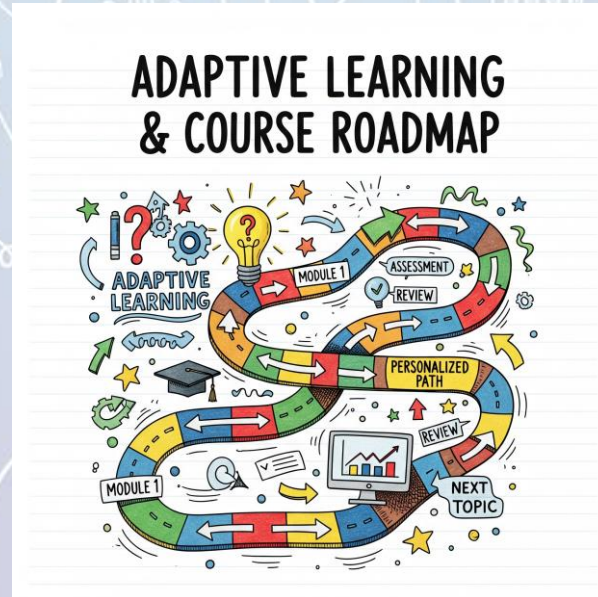
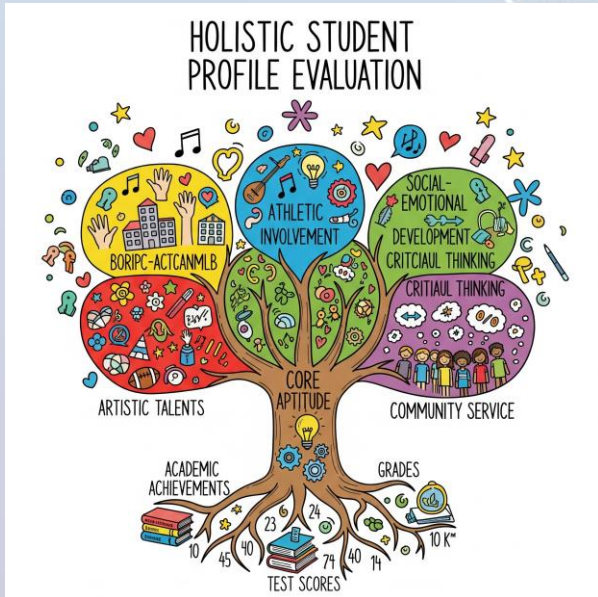
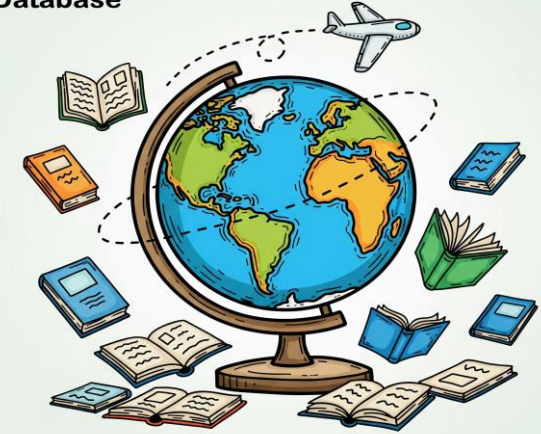
- IBM Cloud Watsonx AI Studio
- IBM Cloud Watsonx AI runtime
- IBM Cloud Agent Lab
- IBM Granite foundation model



Wow Factors:



Global Institutions and Scholarships Database



ALL-IN-ONE CAREER PLANNING PLATFORM



■ Skill and Interest-Based Pathway Design

FutureMap **prioritizes a student's unique interests**, skills, and prior knowledge to create a personalized and future-oriented learning path.

- **Mind Map Generation**

Visualizes the student's complete journey from present skillset to future career, including alternate branches and decision points.

■ Global Institutions and Scholarships Database

Recommends **global and Indian institutions offering the suggested courses**, including those that provide scholarships if the student opts for it.

■ Course Roadmap Adaptability

Continuously updates the personalized roadmap with new courses or institutions as the student progresses or shifts focus.

■ Holistic Student Profile Assessment

Goes beyond academic marks to assess passion, soft skills, extracurriculars, and aptitude for **better alignment with future goals.**

■ One-Stop Career Planning Platform

Eliminates the need to search multiple sources by consolidating guidance, institutions, scholarships, exams, and planning tools in one place.

End Users:

Students

Seek personalized guidance for career paths, courses, colleges, and preparation plans.

Graduates

Explore upskilling or IT career shifts with suitable courses and scholarships.

Career Counselors

Use FutureMap to offer AI-driven career suggestions and roadmaps.


Parents & Guardians





Support children in making smart, informed educational choices.







Educational Institutions



Integrate the tool for career counseling and student advisory services

Deployment:

 IBM watsonx


Upgrade ?  Kalyani Das's Account  Dallas  KD 

Deployment spaces / Future_Map / FutureMap /      

FutureMap  Deployed 

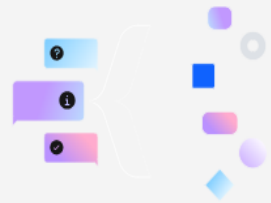
API reference Test **Preview**

New chat +


 FutureMap 01:47 PM


Welcome to FutureMap


Hey! I'm your smart career buddy, helping you choose the best path based on your skills and interest



Quick start samples

"I'm in Class 12 and interested in software development. Can you guide me on what courses or careers I should pursue?" 

"I like coding and problem-solving but don't know what career options are available in the IT field. Can you help me figure that out?" 

Type something... 

FutureMap 🟢 Deployed Online

API reference Test **Preview**

New chat +



You 01:47 PM

"I'm not sure what career path to choose, but I know what I enjoy and what I'm good at. Can you help me explore my options?"



FutureMap 01:47 PM

Hi, I am your Career Companion. How can I help you?

To guide you best, tell me what activities or tasks do you enjoy doing and where do you feel most confident in your abilities. Do they lean more towards problem-solving, creativity, analysis, teaching others, managing projects or something else entirely?



You 01:48 PM

creativity



FutureMap 01:48 PM

That's great! Creativity often aligns well with fields like UI/UX Design, Graphic Design, Content Writing, and even Video Game Design.

To narrow it down further: Do you prefer working with visual elements or text-based content? Are you more interested in designing user interfaces for software applications or creating aesthetic graphics?

Type something...



FutureMap

✔ Deployed Online

API reference

Test

Preview

New chat +



FutureMap 01:54 PM

Alright, since you're interested in both visual elements and designing user interfaces, let's explore the field of UI/UX Design.

This career involves creating intuitive and aesthetically pleasing digital products that users enjoy interacting with. It combines creativity with an understanding of human-computer interaction principles.

To get started in this field:

1. **Learn:** Familiarize yourself with design tools like Figma or Adobe XD for interface prototyping, and learn about UX research methods to understand user needs better. Online platforms such as Coursera or Udemy offer courses on these topics at various budget ranges; some even have free options or scholarships available if needed.
2. **Practice:** Start working on personal projects to build your portfolio showcasing your skills in wireframing, prototyping, and usability testing - all crucial aspects of UI/UX Design work. Websites like Dribbble can provide inspiration while Behance is good for sharing your work samples once ready.

3. **Apply & Certify :** Once comfortable enough, apply for junior roles at startups or mid-sized companies looking for fresh talents via job portals (Indeed, LinkedIn). Consider getting certified by reputed institutions post gaining initial experience which could enhance employability furthermore leading towards senior positions over time . Institutions offering relevant programs include NIFT (National Institute Of Fashion Technology) known more for fashion but also offers Digital Marketing & Communication course useful here too alongside specialized institutes like Amity School of Design etc., globally universities providing online degrees are Stanford University's Human-Computer Interaction program among others .

4. **Career Growth :** With experience under your belt and a strong portfolio demonstrating practical application of learned

type something...



Conclusion:

- The agent can **guide users through career decisions**, suggest personalized pathways, and even draft preparation plans.
- It **reduces effort** by automating research, comparing institutions, and highlighting scholarships.
- FutureMap **enhances clarity, accessibility, and confidence** in career planning across diverse user needs.

Future Scope:

- **Multilingual Support:** Enable career guidance in **regional languages** for **wider accessibility**.
- **Voice Interaction:** **Integrate voice-based Q&A** for a conversational experience.
- **Real-Time Collaboration:** Allow students, parents, and counselors to **explore options together**.
- **Gap Identification:** **Detect gaps in skills** and suggest trending or emerging career paths.
- **Integration with EdTech Platforms:** **Sync with learning platforms** for direct course enrollment.
- **Scholarship Matching Engine:** **Continuously update** and match users with relevant global scholarships.

IBM Certifications:

In recognition of the commitment to achieve
professional excellence



Kalyani Das

Has successfully satisfied the requirements for:

Getting Started with Artificial Intelligence



Issued on: Jul 16, 2025

Issued by: IBM SkillsBuild

Verify: <https://www.credly.com/badges/48d6774a-debe-4095-9d4e-fc0ea95027ad>



IBM **SkillsBuild**

Completion Certificate



This certificate is presented to

Kalyani Das

for the completion of

**Lab: Retrieval Augmented Generation with
LangChain**

(ALM-COURSE_3824998)

According to the Adobe Learning Manager system of record

Completion date: 19 Jul 2025 (GMT)

Learning hours: 20 mins

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Kalyani Das

Has successfully satisfied the requirements for:

Journey to Cloud: Envisioning Your Solution



Issued on: Jul 20, 2025

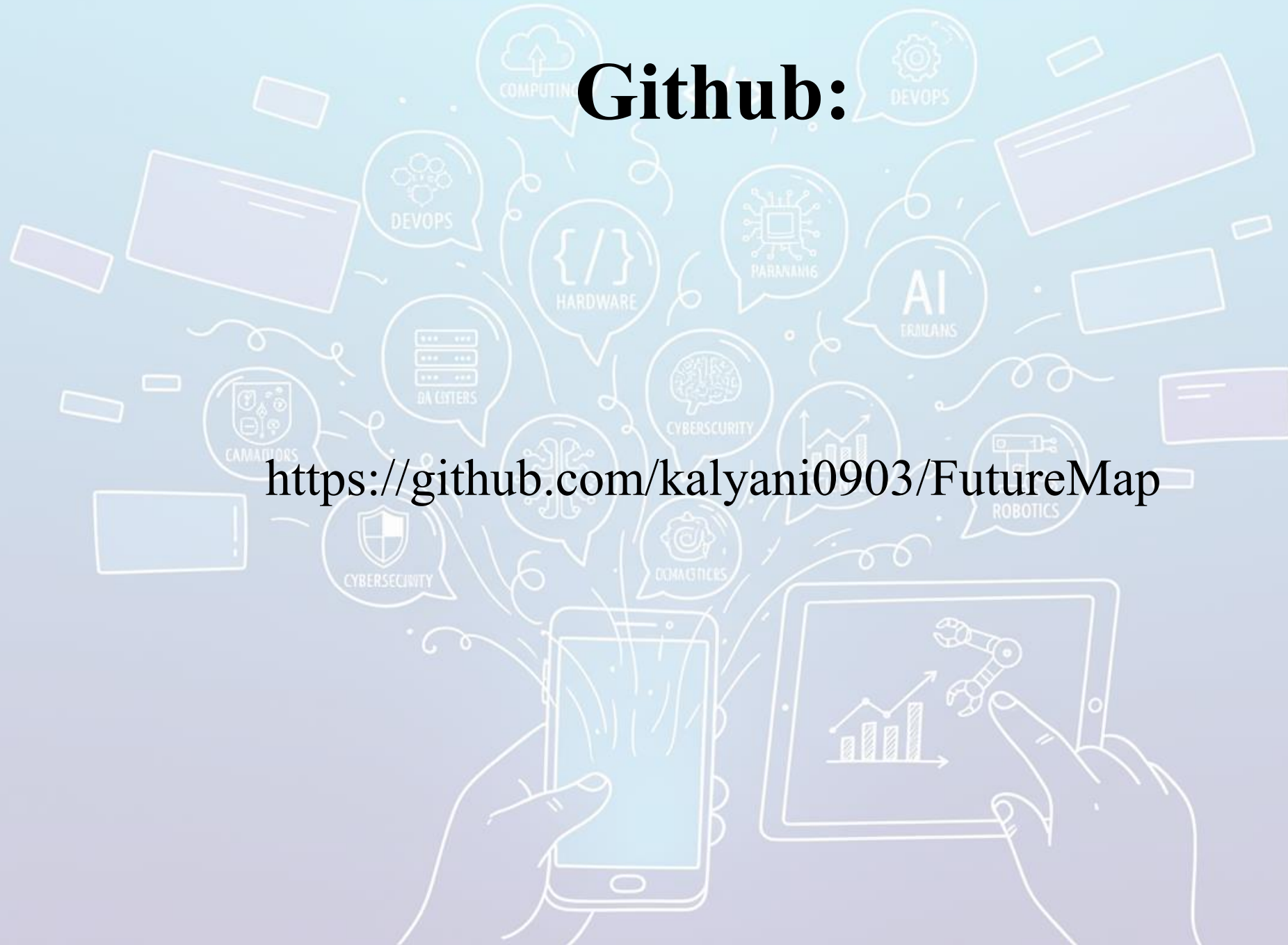
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Verify: <https://www.credly.com/badges/1f21700e-c000-405e-9031-6b3861c48bb9>



Github:

<https://github.com/kalyani0903/FutureMap>





Thank You