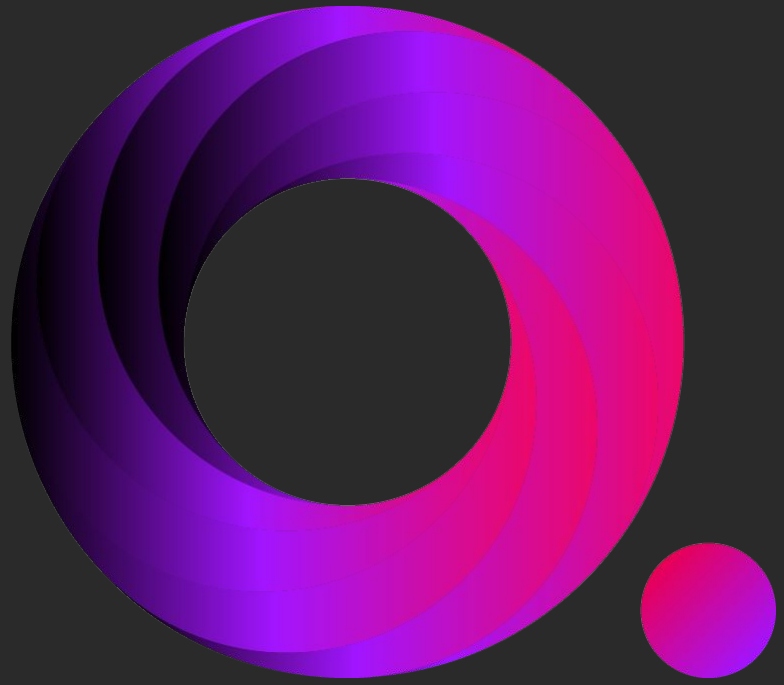


qBraid

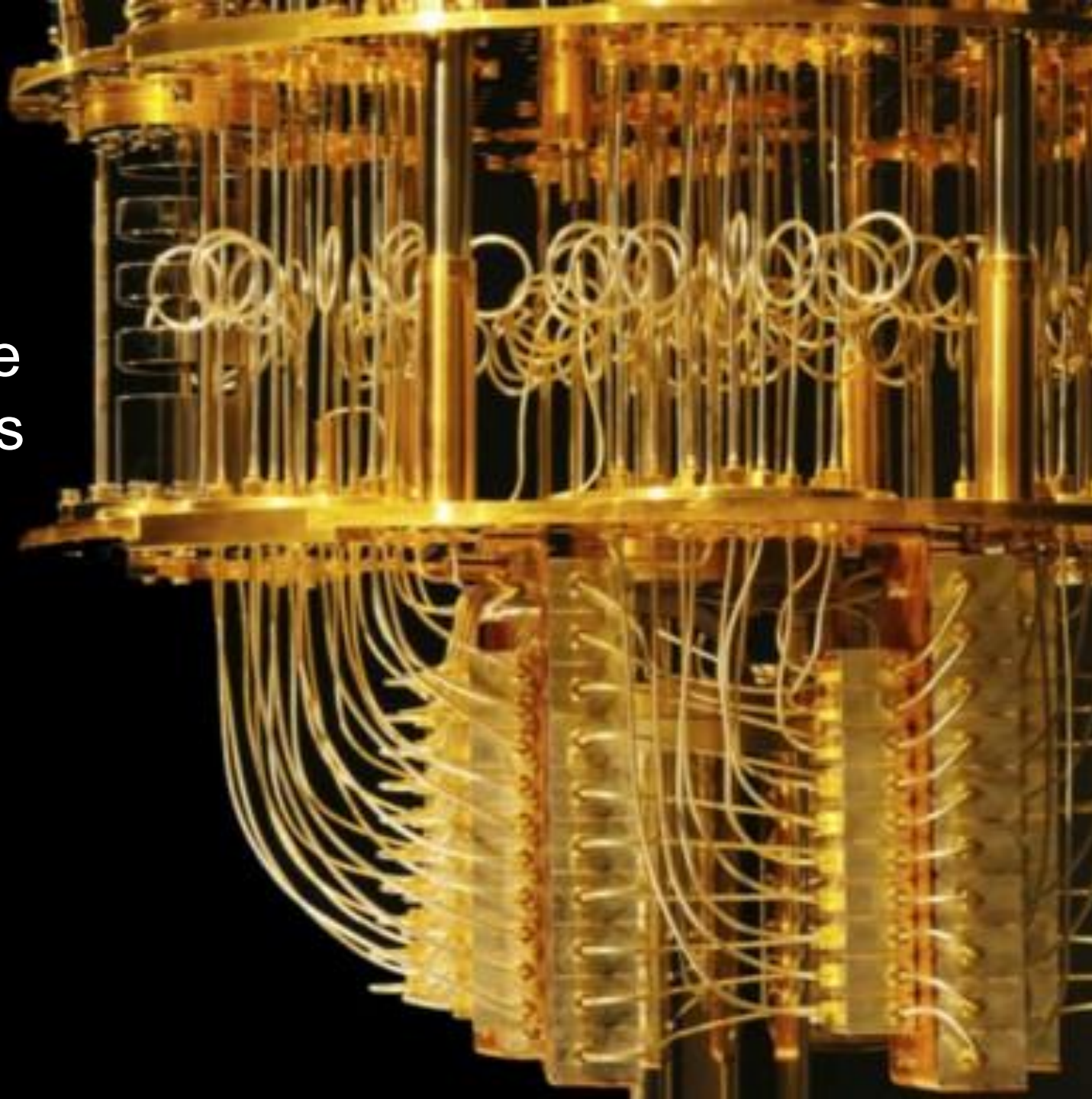
Accelerating the pace of quantum revolution.

Outline.

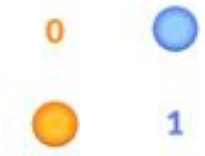
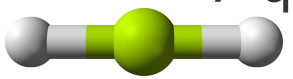
1. What is quantum computing?
2. Why is it relevant?
3. Where does qBraid come in?
4. Demo/writing your first quantum program.

1. What is quantum computing?

Quantum computing uses the quantum mechanical properties such as superposition and entanglement to perform computation.



1. What is quantum computing?

	Classical computers	Quantum computers
Data format	 Either **1 or 0**	 **1 or 0** at the **same time**
Sample representation	8 bits - 01100001 **Letter "A"**	3 qubits- $\frac{\lvert 000\rangle + \lvert 111\rangle}{\sqrt{2}}$ 7 qubits  **Beryllium hydride**
Time to hack the internet	300 trillion years	8 hours

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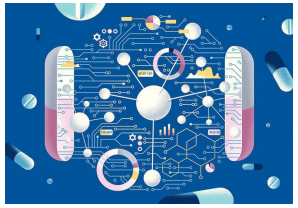
2. Why is this relevant?

Applications of quantum computing

Transportation
Optimization of
Traffic routes

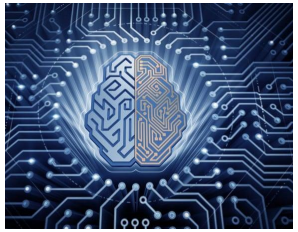


Drug discovery
Simulation of new
drugs

Cryptography
Breaking RSA encryption
and post-quantum
cryptography

Financial modeling
Optimal pricing of derivates

Material research
Predicting properties of complex
material



Quantum AI
Improving AI beyond classical
computing limits

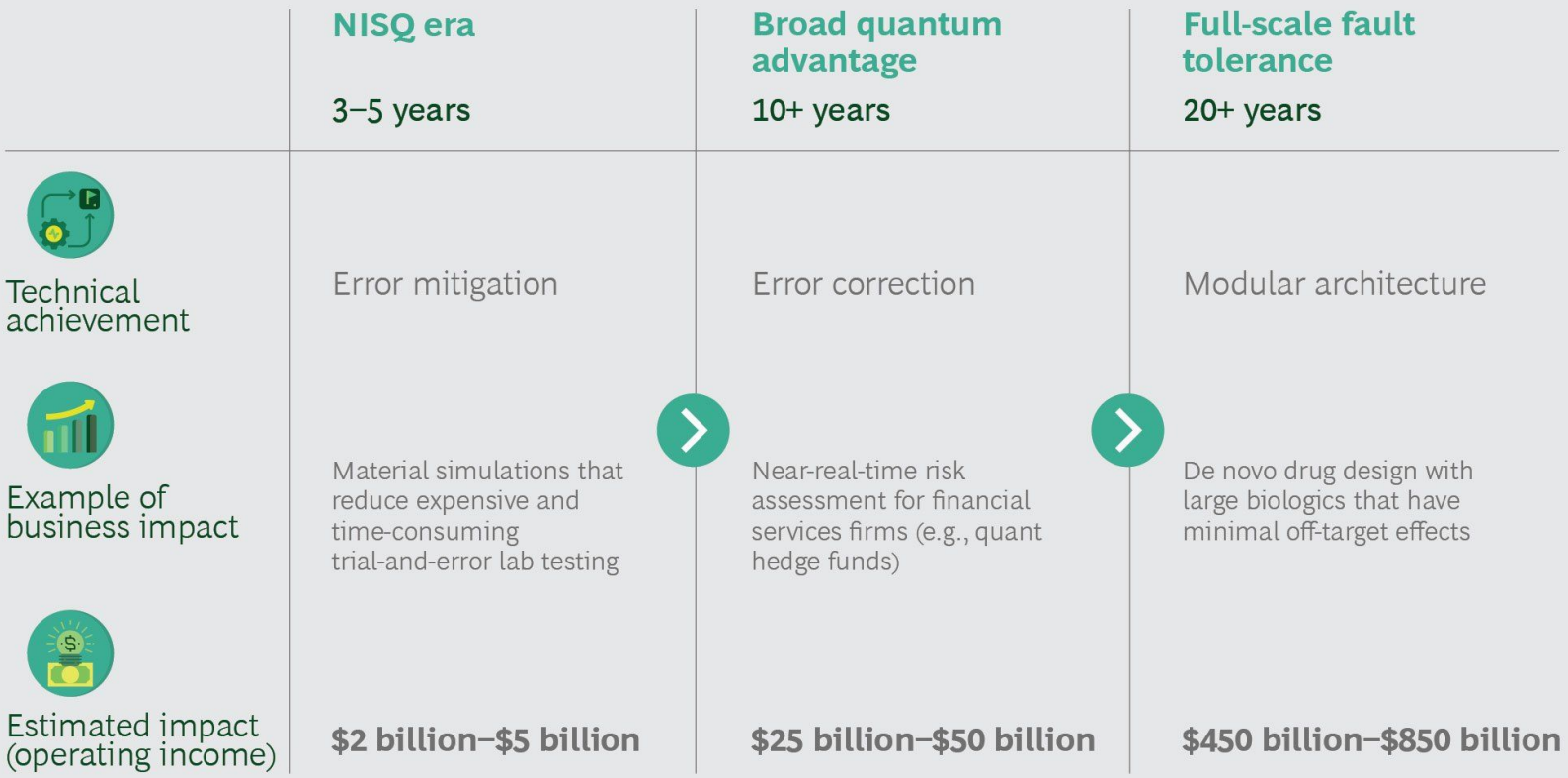
What some of the companies are involved?

And many more are **getting involved every year**

What some of the companies are involved?

From: BCG

EXHIBIT 2 | The Expected Phases of Quantum Computing Maturity



Source: BCG analysis.

Link to the article

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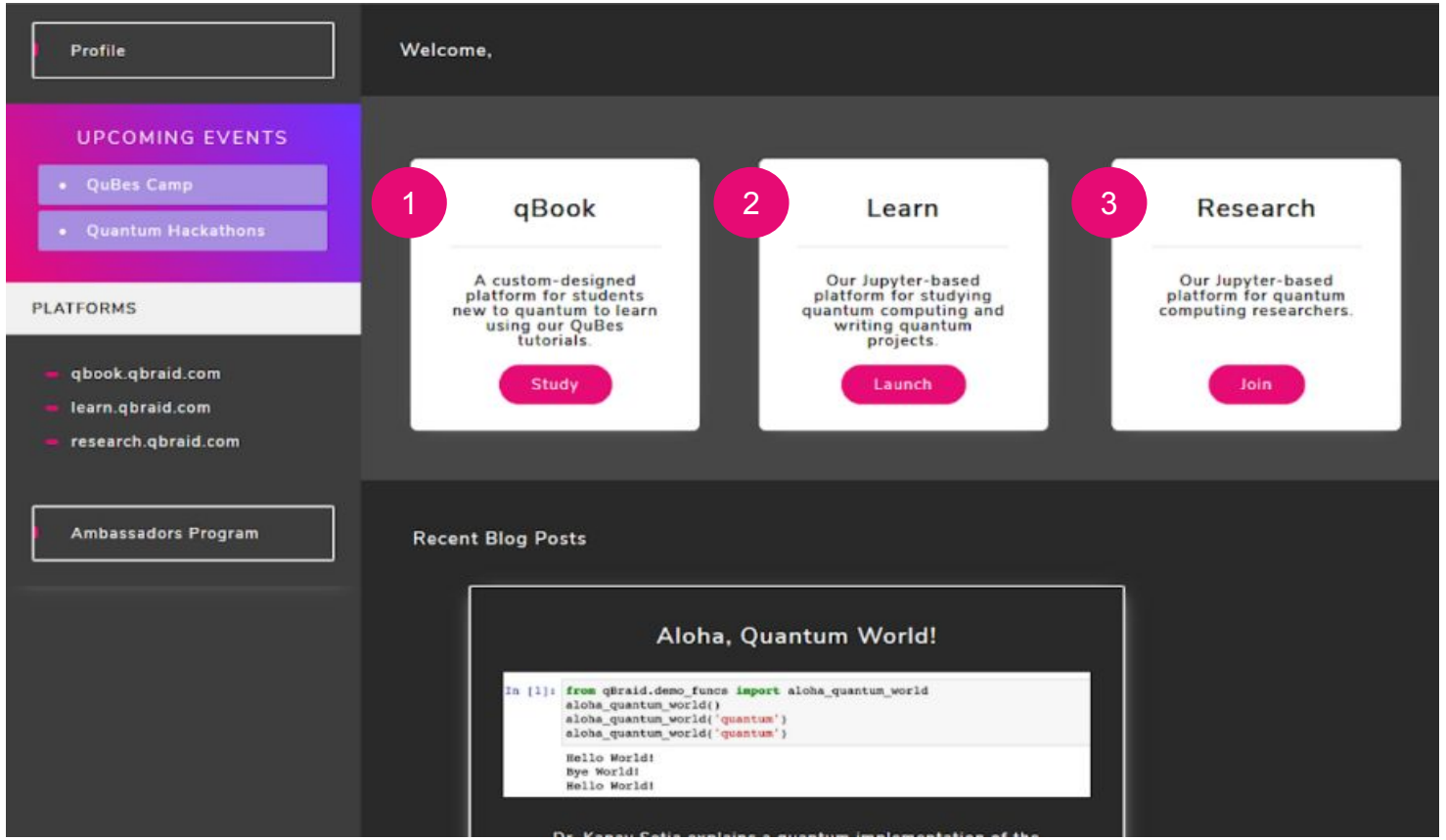
3. Where does qBraid come in?

We are creating the first platform for developers to ***learn***, ***build***, and ***deploy*** quantum software.

1. **qBook**
   A platform for quantum computing content. Enables people to develop and share courses.

2. **Learn**
   A development environment aimed at a new developer.

3. **Research**
   A platform for researchers to develop code for new quantum algorithms and test them on quantum hardware.



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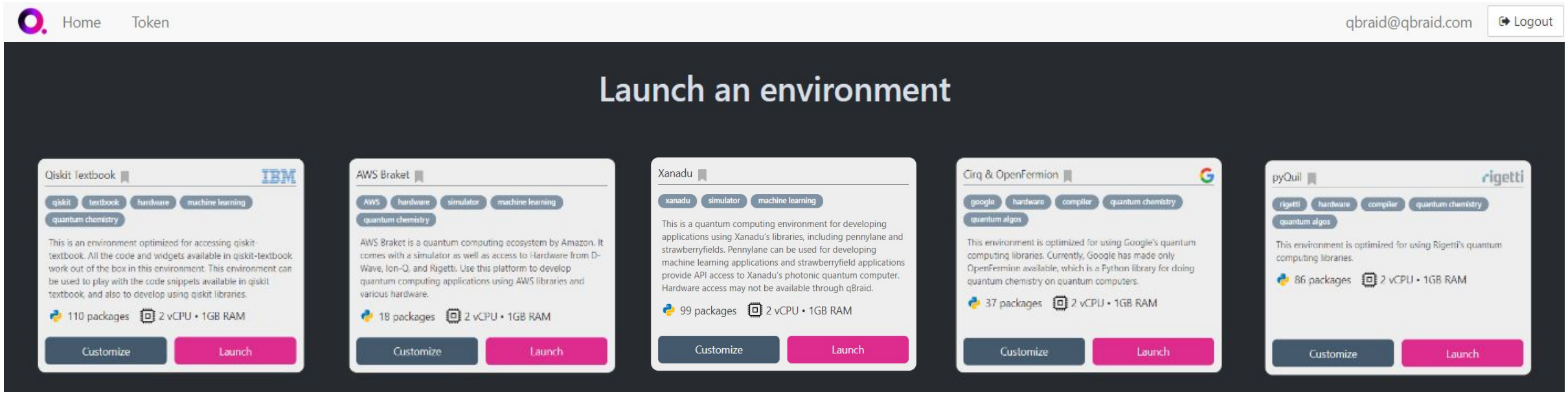
Where does qBraid come in?

Develop for top quantum computing hardware and platforms



IBM aws XANADU Google rigetti

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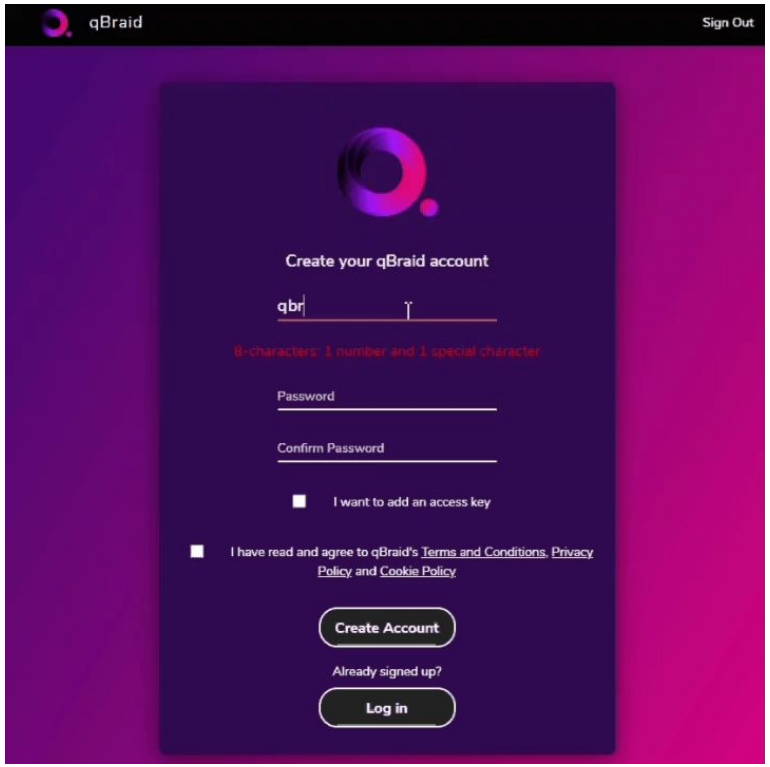
Sign up for qBraid

Go to: https://account.qbraid.com/join



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