Requirements of Coursera Website

1. User Authentication & Profile Management

User Story 1.1: Secure Registration & Login

As a user,
I want to sign up and log in securely using different authentication methods,
So that I can access my learning dashboard safely.

Acceptance Criteria:

Users can sign up via : email/password, Google, Facebook, LinkedIn, Apple ID.

- Password encryption using bcrypt/salted hashing.

User Story 1.2: Role-Based Access Control (RBAC)

As an administrator,
I want to assign different roles (student, instructor, admin),
So that users can only access authorized features.

Acceptance Criteria:

- **Students:** Can enroll in courses, access course materials, take assessments.
- **Instructors:** Can create/manage courses, track student performance.
- **Admins:** Can manage users, courses, platform settings.

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2. Course Discovery & Enrollment

User Story 2.1: AI-Powered Course Recommendations

As a learner,
I want to receive personalized course recommendations,
So that I can quickly find courses that match my interests.

Acceptance Criteria:

- AI-powered recommendations based on past enrollments, skills, job market trends.
- Trending courses, top-rated, and best-selling course suggestions.

User Story 2.2: Flexible Enrollment & Payment Options

As a learner,
I want to enroll in courses using different payment options,
So that I can choose a pricing model that suits me.

Acceptance Criteria:

- One-time purchase, monthly subscription (Coursera Plus), financial aid options.
- Integration with Stripe, PayPal, Apple Pay, Google Pay, cryptocurrency payments.

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3. Course Filtering & Search

User Story 3.1: Advanced Filtering Options

As a learner,
I want to filter courses by multiple criteria (category, difficulty, duration, language, instructor, price, etc.),
So that I can easily find the most relevant courses.

Acceptance Criteria:

- Filtering by : subject, skill level, duration, language, price, instructor, rating, certification availability.
- Real-time search with auto-suggestions and AI-powered semantic search.
- Dynamic updates without page reload (AJAX-based filtering).

User Story 3.2: Performance & Accessibility

As a learner,
****I want fast and accessible filtering,
So that I can quickly find courses on any device.

Acceptance Criteria:

- Filtering must work **instantly (<1 second response time)** even for **100,000+ courses**.
- **Keyboard navigable, screen reader compatible, ARIA labels for accessibility**.
- **Localization support** for different languages.

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4. Learning Experience & Course Content

User Story 4.1: Video Streaming & Offline Learning

As a student,
I want to stream high-quality course videos and download them for offline access,
So that I can learn at my convenience.

Acceptance Criteria:

- Adaptive streaming with **CDN caching and bandwidth optimization**.
- **Download feature for offline access** in mobile apps.
- **Auto-generated subtitles in multiple languages**.

User Story 4.2: AI-Powered Auto-Grading & Assessments

As a student,
I want to complete assignments and receive instant feedback,
So that I can track my learning progress.

Acceptance Criteria:

- Auto-grading for **quizzes, multiple-choice, and coding challenges**.
- **AI-based plagiarism detection for assignments**.
- **AI-powered chat assistant for learning support**.

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5. Interactive & Gamified Learning

User Story 5.1: Peer Reviews & Group Discussions

As a student,
I want to collaborate with peers and receive feedback,
So that I can improve my learning through community engagement.

Acceptance Criteria:

- **Discussion forums, live Q&A sessions, and group projects**.
- Peer-reviewed assignments with a **grading rubric**.

User Story 5.2: Gamification & Progress Tracking

As a student,
I want to earn rewards and track my learning progress,
So that I stay motivated throughout the course.

Acceptance Criteria:

- **Badges, leaderboards, and certificates** for milestones.
- **XP points and streak tracking** for daily engagement.
- **AI-driven personalized learning paths**.

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6. Certification & Skill Verification

User Story 6.1: Blockchain-Based Certification

As a student,
I want to receive a secure and verifiable certificate,
So that I can showcase my achievements to employers.

Acceptance Criteria:

- Digital certificates stored on **blockchain for tamper-proof verification**.
- **QR code & verification link** for employers.