Application Requirements

1. Course Structure

- **Course Types:**

    - **Free Courses:** Accessible without any payment.
    - **Premium Courses:** Require purchase with the application's currency (coins). The price for each premium course is determined by the administrators.

- **Modules:**

    - Every course is divided into one or more modules.
    - The number of modules in any given course is decided by the administrators.
    - Each module is linked to the specific course and its content; there is no possibility of accessing modules without being enrolled in the associated course.

- **Bonus Modules:**

    - Some courses may include an additional bonus module. This bonus module is not part of the standard sequential modules.
    - The bonus module is intended for supplementary content (e.g., interesting facts) and must be unlocked by spending coins.
    - The decision to include a bonus module and the coin cost to unlock it are made solely by the administrators.

- **Course Difficulty:**

    - Each course has an associated difficulty level. The difficulty rating is set by the administrators and applies to the overall course content.

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2. Module Structure and Completion

- **Sequential Ordering:**

    - Modules must be completed in a strict, pre-defined sequential order. The exact order is established by the administrators.
    - No module (other than a bonus module) becomes accessible until all preceding modules have been marked as completed.

- **User Completion Actions:**

    - Users may mark a module as completed through an interaction within the module, once they have reviewed its content and decided they are done with it. This action is non-reversible.
    - A course is considered complete when the user has marked all modules as completed. The bonus module, if present, is an exception to this.
    - Completion of modules is recorded for progress tracking purposes.

- **Clarifications:**

    - The number, order, and content of modules (including any bonus modules) are set by administrators.
    - There is no mechanism for users to modify the module sequence or the completion criteria.

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3. Enrollment and Purchase

- **Enrollment Requirement:**

    - Users must enroll in a course before any of its modules become accessible.

- **Premium Course Purchase:**

    - For premium courses, enrollment is contingent upon the user purchasing the course using coins.
    - The coin price for each premium course is defined by the administrators and must be met before access is granted.

- **Access Restrictions:**

  - If a user is not enrolled (or has not purchased the course), the modules and their associated content remain inaccessible.

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4. Coin Economy and Rewards

- **Application Currency – Coins:**

  - Coins serve as the sole currency within the application.
  - Administrators exclusively determine the coin rewards for various actions.

- **Earning Coins:**

  - **Course Completion Reward:** Users receive a coin reward upon completing an entire course. The amount is set by administrators.
  - **Daily Application Start Reward:** Users earn a coin bonus upon their first application start each day. The coin amount is determined by administrators.
  - **Module Image Interaction Reward:** Certain images embedded within modules provide a one-time coin reward when clicked. The images that offer these rewards and the reward amounts are selected and set by administrators.

- **Bonus and Timer-Based Rewards:**

  - Each course has an associated timer (see Section 5). If the user finishes the course within the allotted time, an extra coin reward is given. The reward amount is predetermined by administrators.
  - All reward amounts and conditions are set by administrators and cannot be altered by users.

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5. Timer Functionality and Extra Rewards

- **Course Timer:**

  - Every course includes a timer whose duration is defined by the administrators.

- ○ The timer ticks down while the user is accessing the course and it is paused and its progress saved, when the user is no longer accessing the course. Accessing the course again will cause the timer to continue ticking down from where it left off.
- ○ The user cannot reset the timer or interfere with it in any other way.

- **Time-Based Reward Condition:**

  - ○ If a user marks all modules as completed within the allocated time, they are awarded an additional coin bonus.
  - ○ The exact coin reward for completing the course within the timer is set by administrators.

- **Enforcement:**

  - ○ The timer and its associated reward condition apply to every course, regardless of course type.
  - ○ Failure to complete the course within the timer does not affect normal coin rewards (such as for course completion) but disqualifies the user from receiving the extra timer-based reward.

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6. Progress Tracking

- **User Progress:**

  - ○ The application tracks the progress for each course based on the modules the user has marked as completed.
  - ○ Progress data includes the total number of modules and the number of modules completed.

- **Course Completion:**

  - ○ A course is officially completed when all of its modules (excluding the bonus module, if present) are marked as completed.
  - ○ Progress information is maintained for each enrolled course and is updated in real time as modules are completed.

- **Transparency:**

  - Users can verify their progress at any point. Progress is calculated based solely on module completion; enrollment status and coin transactions do not alter this measurement.

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7. Search and Filter Functionalities

- **Search Functionality:**

  - Users can perform text-based searches for courses.
  - The search input is limited to 100 characters, attempting to input any characters past this limit will have no effects.
  - Matching is done using substring matching on course titles; any course whose title contains the input substring (in any part of the title) will be considered a match.

- **Filter Functionality:**

  - Users have the option to filter courses based on the following criteria:
    - **Enrollment Status:** Ability to filter courses by those in which the user is currently enrolled versus those not enrolled.
    - **Course Type:** Ability to filter courses based on whether they are free or premium.
    - **Topics:** Ability to filter courses by topics associated with each course.
  - Topics are set and associated with courses at the discretion of administrators. There is no fixed limit to the number of topics per course.
  - Multiple filters can be applied simultaneously; only courses that satisfy all active filters are returned.
  - If no courses match the active search and filter criteria, the result is an empty set.
  - Users have the ability to remove individual filters or clear all active filters.

- **Integration of Search and Filters:**

  - The search and filter functionalities operate in conjunction. When both are used, only courses that satisfy both the substring match in the title and the active filter conditions will be shown.

8. Administrative Capabilities

Administrators have full control over the configuration and management of all elements within the application. All of these interactions happen outside the range of the application, meaning there is no administrator account, administrators hardcode data and modify the application directly:

- **Course Management:**

  - Create, modify, or remove courses.
  - Define each course as free or premium.
  - Set the coin price for premium courses.
  - Assign a difficulty level to each course.
  - Configure the timer duration and extra coin reward for timely completion.
  - Assign topics to courses; the number of topics is not restricted.

- **Module Management:**

  - Determine the number of modules per course.
  - Establish the sequential order in which modules must be completed.
  - Optionally designate one module as a bonus module and define its coin unlock cost.

- **Coin Rewards Configuration:**

  - Set coin rewards for course completion, daily application start, and module image interactions.
  - Designate which images within modules provide one-time coin rewards.
  - Define the extra coin reward for completing a course within the set timer.

- **Search and Filter Parameters:**

  - No direct manipulation of search functionality is permitted by users; all underlying criteria (course titles, topics) are defined by the administrators.
  - Administrators ensure that all courses have clearly defined titles and topics to allow effective searching and filtering.

- **Security and Integrity:**

  - All parameters related to coin transactions, course enrollment, module order, and reward distributions are exclusively set by administrators.
  - Users have no authority to alter any administrator-defined settings.

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9. Final Clarifications

- **Administrator-Determined Parameters:**

  - All coin rewards, topics, timer durations, module orders, course prices, and bonus module configurations are set solely at the discretion of administrators.
  - No user action or input can modify these administrator-defined parameters.

- **User Responsibilities:**

  - Users may enroll in courses and must mark modules as completed in the defined sequential order.
  - Users must meet the purchase requirements for premium courses before accessing any module content.
  - Progress tracking and coin rewards operate strictly based on the user's actions (e.g., marking modules complete, starting the application, interacting with designated images).

- **Unambiguous Functionality:**

  - Every functionality described in this document has a single, clear interpretation. There are no alternative or optional interpretations; each rule must be followed as stated.
  - This document serves as the binding specification for how the application operates, ensuring that everyone, including those who may attempt to interpret rules more loosely, is held to these strict definitions.