

Blockchain Project Bit 3

Task 1: Simulate a Race Condition

- **Simulate the race condition:** Assume that two students attempt to enroll in a module with only one remaining slot at exactly the same time.
- **Steps:**
 1. Simulate two students trying to enroll at the same time using the *enroll* function.
 2. Discuss the result: The race condition may cause both students to be enrolled, even though only one slot was available.

Task 2: Analyze the Race Condition

1. Discuss the consequences of race conditions in an enrollment system and how it can affect fairness and consistency.

Task 3: Mitigate the Race Condition

1. Implement race condition prevention strategies