

CR TABLE BY SCENARIO

Change 1. Electronic payments

Description: Allow membership through online payments with credit card, debit card or PayPal.

Change 2. Rewards

Description: Introduce a points system that rewards frequent gym attendance.

Field	Scenario 1 - CR-01	Scenario 1 - CR-02	Scenario 2 - CR-01	Scenario 2 - CR-02	Scenario 3 - CR-01	Scenario 3 - CR-02
Scenario	Scenario 1	Scenario 1	Scenario 2	Scenario 2	Scenario 3	Scenario 3
CR	CR-01	CR-02	CR-01	CR-02	CR-01	CR-02
Issue	API integration documentation inconsistent	No ruleset for point allocation	Backend conflict with membership logic	Rewards UI delay due to priority shift	Security flaw in callback verification	Race condition in point system
Handling	Team contacted provider, created sandbox	Analyst drafted logic tree	Bug isolated, schema redesign	PM assigned intern for support	OAuth2 module added by senior dev	Locking strategy added, extended testing
Outcome	Addressing – awaiting docs	Addressing – needs validation	Solved – merged	Addressing – finishing soon	Solved – QA passed	Addressing – QA pending
Risk Level	Medium	Medium	High	Medium	Critical	High
Decision Criteria	Acceptable	Acceptable	Requires Evaluation	Requires Evaluation	Requires Evaluation	Requires Evaluation
HR Feasibility	Yes – existing team	Yes – existing team	Yes – reassigned task	Yes – reassigned task	Yes – senior dev assigned	Yes – reassigned task
Estimated Time	4 weeks	3 weeks	4 weeks	3 weeks	3 weeks	4 weeks
Time Elapsed	1 week	1 week	2 weeks	2 weeks	3 weeks	3 weeks
Coding Time	4h	3h	10h	4h	12h	10h
Testing Time	2h	1h	4h	2h	5h	6h
Optimization Time	1h	0h	2h	1h	2h	2h
Effort	Medium	Medium	High	Medium	High	High
Opportunities	Improved UX	Gamification boost	Architecture improvement	User motivation	Data protection	Concurrency control
Risks	Vendor dependency	Incomplete early requirements	Backend logic overlap	Frontend team limitation	Late-stage critical issue	Underestimated sync issue

Scenario 1: Beginning of the project – minimal code written

CR-01 Issue: API integration documentation from the payment gateway is inconsistent, causing initial delays.

- Handling: Assigned team to contact provider and request updated specs. Temporary sandbox created for simulation.
- Outcome: Addressing. Still awaiting updated documentation.

CR-02 Issue: No ruleset defined for point allocation frequency.

- Handling: Requirements analyst drafted a logic tree proposal, pending validation in next meeting.
- Outcome: Addressing. Requires functional confirmation.

Scenario 2: Mid-development – ~50% of code written

CR-01 Issue: Unexpected behavior in backend after integrating sandboxed payment test – it conflicts with membership renewal logic.

- Handling: Bug isolated by backend lead. A new database schema proposed to separate transaction logs.
- Outcome: Solved. Retested and merged.

CR-02 Issue: UI designer delayed layout for rewards tracking dashboard due to prioritization of core features.

- Handling: PM reallocated frontend intern to assist with design.
- Outcome: Addressing. Design to be completed within the week.

Scenario 3: Final stages – ~90% code completed

CR-01 Issue: Security vulnerability found in payment callback verification.

- Handling: Escalated to senior backend developer verification module introduced.
- Outcome: Solved. Passed QA penetration test.

CR-02 Issue: Gamification logic causes race conditions when simultaneous point calculations occur.

- Handling: Critical bug. Database locking strategy revised. Testing extended 2 more days.
- Outcome: Addressing. QA retesting pending.