Solutions

2.1

- Non-functional – it constrains how well, not what ✓.

2.2

- E.g. “a new member completes first borrow in under 3 minutes without help (measured with 5 first-time users)“ ✓.

2.3

- It names a means, not a need – requirements state the need; solutions belong in design ✓.

3.1

- FR-4: a member may renew at most twice per loan; each renewal sets due = current due + 14 days; renewal is refused if another member holds a reservation on the copy ✓.
- Test 1 (renew ok): borrow with due D; renew; expect due $D+14$; renew again; expect $D+28$; a third renew is refused ✓.
- Test 2 (reservation blocks): reserve the copy to another member; renew; expect refusal with reason ✓.
- NFR: renewal responds within 1 s at p95 ✓.

3.2

- Sequence: red acceptance test (due = borrow date + 21, three date cases) → commit implementing the loan ledger’s date rule → message names FR-2 and the test ✓.
- 2026-02-10 + 21 = 2026-03-03; 2028-02-10 + 21 = 2028-03-02 (leap February carries 29 days); 2026-12-20 + 21 = 2027-01-10 ✓.
- The suite checks: the acceptance test exists, passes, and the closing commit links to FR-2 – the auditable chain ✓.