 # SunSafe Sprint — Project Report

1. Introduction

SunSafe Sprint is a 2D dice board game that raises awareness about sun safety and melanoma risk in Australia. Players move along a 6×6 path and respond to brief event, action, and quiz cards that affect three meters—Skin Health (SH), SunSmart (SS), and Exposure (EX). The objective is to arrive at the finish while keeping SH > 0, SS ≥ 12, and EX ≤ 20.

2. Theme Justification & Potential Impact

Australia's high UV levels create significant sunburn and skin cancer risk. The game promotes everyday behaviours—checking UV Index, wearing a hat and sunglasses, using SPF 30+ (or higher) and reapplying, seeking shade, covering up, and timing outdoor activity outside peak UV hours. By tying these choices to visible meters and immediate consequences, players internalise practical habits and myths are gently corrected through tiny quizzes.

3. Technology Stack (Front-end Only)

- HTML, CSS, JavaScript (no frameworks required).
- Modular JS splits data (cards), rules, and UI updates.
- Optional static assets (logo and dice sound).

4. Game Mechanics

- **Board & flow:** 6×6 linear path (0–35). Each turn: roll → move → resolve tile.
- **Tiles:**
  - **Event (UV):** small AU-context fact + automatic effects on SH/SS/EX.
  - **Action:** a choice with trade-offs (comfort vs. protection).
  - **Quiz:** single-question MCQ myth-buster; right answers raise SS / lower EX.
- **Meters:**
  - **SH** falls with unprotected exposure; small recovery via rest/shade.
  - **SS** increases with good habits and quiz success.
  - **EX** increases with riskier choices; decreases with protection/ shade.

5. Mechanics–Issue Alignment

- **Dice randomness** models unpredictable conditions (cloud cover, time outdoors).

- **Choice trade-offs** reflect real behaviour change (e.g., “quick swim now” vs. “reapply then swim”).

- **Meters** make the invisible (UV risk) visible, reinforcing cumulative exposure and simple mitigations.

6. Technical Execution Notes

- Pure browser runtime; no backend or install steps.

- Clamped meter values, single end-state evaluator, and accessible ARIA labels.

- State and UI kept small and readable for easy marking and extension.

7. Reflection

What worked: Tiny, focused content; short sessions; explicit meter feedback tied to habits.

What we’d improve: Level variants (beach, park, sports day), difficulty sliders (summer vs winter UV), and optional references modal linking to official public resources.

AI use: LLMs for brainstorming card copy, rule tuning, and refactoring. Human review ensured tone accuracy and avoided medical advice.