**Invoicing ROI Simulator**

Planned approach & architecture

* Single Page App (React) for the UI.
* Node + Express backend providing REST endpoints and calculation logic.
* Database: pick **MongoDB** (document) or **SQLite/Postgres** (SQL).

Technologies

* Frontend: **React** (Create React App or Vite), basic CSS or Tailwind.
* Backend: **Node.js + Express**.
* Database options:
* **MongoDB** (easy JSON storage, fast CRUD) — use Mongoose for models.
* **SQLite** or **Postgres** (if you prefer SQL). Use knex or Sequelize if using SQL.
* PDF/report: **puppeteer** (render HTML → PDF) or **pdfkit**.

Key Features

* Input form: accepts the PRD fields (invoice volume, staff, hours, wage, error rate, error cost, time horizon, setup cost).
* POST /simulate: server computes and returns JSON results immediately.
* Save/load/delete scenarios: store inputs + computed results in DB.
* POST /report/generate: require email, return PDF/HTML snapshot.
* API EndpointsPOST /simulate — body: inputs; returns: computed metrics.
* POST /scenarios — save scenario.
* GET /scenarios — list scenarios.
* GET /scenarios/:id — load scenario.
* DELETE /scenarios/:id — delete scenario.POST /report/generate — requires { scenarioId, email }.

Architecture

