Development Setup Instructions

Multi-Service Development Setup

To run all services properly, you need to start them in separate terminals with different ports:

Terminal 1: Marketing App (Next.js)

```
cd apps/marketing
pnpm dev
```

- Runs on: http://localhost:3000
- This is the main marketing website

Terminal 2: Threat Simulator WASM (Trunk)

```
cd apps/threat-simulator-desktop
pnpm dev
```

- Runs on: http://localhost:8080
- This serves the WASM files and assets
- The marketing app will fetch WASM files from this port

Terminal 3: Utils (if needed)

```
cd packages/utils
pnpm dev
```

- Development mode for shared utilities

Port Configuration

- **Marketing App**: Port 3000 (Next.js frontend)
- **WASM Server**: Port 8080 (Trunk dev server for WASM assets)
- **Utils**: Port varies (if running in dev mode)

Important Notes

1. **Start WASM server first** - The marketing app depends on it for WASM assets
2. **Keep both terminals running** - Don't close either terminal while developing
3. **WASM files are served from port 8080** - The marketing app is configured to fetch from localhost:8080

4. **React hydration issues are fixed** - Added `suppressHydrationWarning` to prevent browser extension conflicts

Troubleshooting

- If WASM fails to load: Make sure the threat-simulator-desktop service is running on port 8080
- If you see connection refused errors: Check that all services are running on their correct ports
- If you see compilation errors: Run `cargo check` in the threat-simulator-desktop directory

Recent Fixes Applied

- ☑ Fixed React hydration mismatch (browser extension conflicts)
- ☑ Fixed Rust compilation errors (type mismatches)
- ☑ Configured different ports for each service
- ☑ Updated WASM asset URLs to point to correct port
- ☑ Fixed Trunk build directory issues