⭐ **ELIAS – Day 14 (Monday) Official Work Plan**

(Stabilization & UI Integration Sprint)

(Work Session: ~3 hours per member — moderate workload)

❎ **Team Roles (Reference)**

Member	Role	Focus Today
M S	Project Lead	UI integration + system orchestration
S S	NLP Lead	Polishing NLP rules + new fallback logic
A K	Vision Engineer	Optimizing recognition speed
R A	Plugin Developer	Finishing remaining plugins
M A	Documentation & QA	Documentation + interactive guide

🎯 **Day 14 Theme:**

"Polish, Connect & Make It Usable"

Day 13 finished MOST of the core components.
Day 14 makes them feel like **one unified system.**

🟦 **1. M S — Project Integrator**

🔵 **Task 1 — Connect UI to Backend (Phase 1)**

In ui/streamlit_app.py (or your UI file):

- Load the NLP parser

- Send results to route_intent()

- Display:

    o Intent detected

    o Plugin results

    o Any errors

- Add a clean UI layout with sections:

    o Input box

- o   Output box

- o   Logs preview

- o   System info

🔵 **Task 2 — Add "System Status Panel"**

Small panel in UI:

- NLP: OK / Error

- Vision: OK / Disabled

- Plugins Loaded: (list)

- Last command: (timestamp)

This visually proves everything is working.

🔵 **Task 3 — Add Config File Support**

Create config.json:

```
{

 "require_auth": false,

 "enable_logs": true,

 "ui_theme": "dark"

}
```

Load it in app.py or UI.

Deliverables:
✓ UI integrated
✓ Basic config support

🟩 **2. S S — NLP Developer**

🟢 **Task 1 — Improve Fallback Recognition**

Add detection for:

- If input ends with "?", treat it as a question → hint intent

- If input contains verbs like "play", map to music plugin

- If input contains a file-like phrase ("open notes", "show tasks"), map accordingly

🟢 Task 2 — Add 3 new intents

Recommended:

1. **"delete_note"** — entity: title
2. **"play_music"** — entity: song name
3. **"tell_joke"** — no entity required

🟢 Task 3 — Add token weighting

Enhance hybrid model scoring:

- If URL in input → bump "open_website"
- If contains "search" or "find" → bump "search_web" intent
- If contains "note" → bump note-related intents

This increases accuracy without machine learning.

Deliverables:
✓ 3 new intents
✓ Fallback improvements
✓ Weighted ranking logic

🟪 3. A K — Vision Engineer

🟣 Task 1 — Speed Optimization

Improve detect_face():

- Resize webcam frame before processing (e.g., 480px width)
- Convert BGR → RGB before encoding
- Cache known face encoding in memory
- Only run full detection every 3 seconds (cached in between)

🟣 Task 2 — Add Vision Logging

In logs/vision_log.txt:

- Time

- Face_detected: True/False

- Authentication time

🟣 Task 3 — Vision Exception Handling

Ensure:

- No webcam? → fallback gracefully

- Multiple faces? → reject

- Poor lighting? → return neutral warning

Deliverables:

✓ Faster, smooth face auth

✓ Safe, stable, non-crashing vision module

🟧 4. R A — Plugin Developer

🟠 Task 1 — Complete "play_music" Plugin

Folder: /assets/music/

Features:

- Input: "play song xyz"

- Match closest filename

- Use playsound or pydub

🟠 Task 2 — Add "delete_note" Plugin

- Delete by filename

- Confirm deletion

- Write safe fallback if file missing

🟠 Task 3 — Add "tell_joke" Plugin

Simple JSON file:

```
{
  "jokes": ["...", "...", "..."]
}
```

Return a random joke.

Deliverables:

✓ play_music

✓ delete_note

✓ tell_joke

All lightweight, fast, and integrated.

🟨 **5. M A — Documentation & QA**

🟡 **Task 1 — Update User Manual**

Sections to add:

- Using the UI

- Vision authentication guide

- All available intents

- Example commands

- Plugin list

- Troubleshooting

🟡 **Task 2 — Create "Testing Script v1"**

A single document with:

- 15 manual test cases

- Expected output

- Pass/Fail checklist

🟡 **Task 3 — Screenshot Capture**

Take screenshots of:

- UI running

- Notes plugin

- Website & YouTube actions

- Vision preview

- Logs folder

Deliverables:

✔ Updated manual

✔ Testing script

✔ Screenshot package

🎯 **Day 14 End-of-Day Outcome**

By tonight:

✔ UI connected to NLP + Plugins

✔ System status visible

✔ Vision optimized

✔ New intents added

✔ Music + Joke + Delete note plugins ready

✔ Documentation updated

✔ Testing script ready

Meaning...

⚡ **The entire ELIAS system will be 98% complete.**

Next days (15–16) = polishing + rehearsal.