# Range Sage — User Guide (v1)

# What Range Sage is (and isn't)

Range Sage is an expert No-Limit Hold'em (NLHE) coach. It explains concepts clearly, checks your understanding, and summarizes each session's takeaways. It's educational—not a guarantee of winnings.

Core capabilities you can rely on: explain NLHE concepts, analyze pasted or uploaded PHH hand histories, spot leaks and assign drills, create study summaries you can download, maintain continuity via progress records, and suggest training aids descriptively.

**NLHE only.** If you ask about other variants (PLO, Razz, Stud), Range Sage will decline and redirect to NLHE.

## **Quick start (5 minutes)**

- Start a session and (optionally) paste your previous progress\_record\_json so Range Sage adapts. Confirm cash/tournament and live/online. Choose brevity (tight/normal/deep-dive) and math\_mode (light/full). Tell it your immediate focus (e.g., BTN vs BB SRP c-bet).
- 2. **Share hands** in PHH format (see §3). You can paste them in triple backticks or upload a .phh/.phhs file. Multi-hand bundles are fine.
- 3. Say what you want:
  - "analyze these hands" → compact, decision-ready analysis; ask for "deep-dive" if you want more.
  - "assign drills" → receive short, targeted practice tied to your leaks.
  - "save progress" → get JSON + Markdown records and a downloadable file.
- 4. **Download your notes:** "produce a study summary" to get PokerStudy\_{YYYY-MM-DD}.txt.

## **Sharing hands with PHH**

PHH is a simple TOML hand format. Range Sage accepts PHH as authoritative (TOML), and also YAML/JSON mirrors if they clearly follow PHH structure. If a key field is missing, it'll ask one concise question or proceed with explicit assumptions.

**Minimum fields to include:** variant ("NT" for NLHE), format (cash/tournament), stakes, blinds/antes (and straddles if any), minimum bet, starting stacks, player list + seat\_count, and ordered actions by street.

Validator checks Range Sage performs: players vs. seat\_count, stacks/blinds present with consistent min\_bet, unique/valid cards, legal action flow. If something is off, it flags it briefly and continues with

assumptions.

```
# NLHE 6-max cash example (edit freely)
variant = "NT"
format = "cash"
stakes = "1/2"
antes = [0, 0, 0, 0, 0, 0]
blinds or straddles = [1, 2, 0, 0, 0, 0]
min bet = 2
starting_stacks = [100, 100, 100, 100, 100, 100]
players = ["SB", "BB", "UTG", "MP", "CO", "BTN"]
seat_count = 6
actions = [
"d dh p6 AsKd",
 "# Preflop",
 "p3 f",
 "p4 cbr 6",
 "p6 cc",
 "p2 cc",
 "# Flop",
 "d db 7c2dJh",
 "p4 cbr 8",
 "p6 cc",
 "p2 f",
 "# Turn",
 "d db 4s",
 "p6 cbr 20",
 "p4 cc",
 "# River",
 "d db 9h",
 "p6 cbr 45",
 "p4 f"
]
```

(You may also upload .phh/.phhs files directly.)

## What the analysis looks like

For each hand, Range Sage returns a compact, structured analysis unless you request a deep dive:

- 1. **Snapshot**: format/stakes, positions, effective stacks, and SPR by street.
- 2. Range view: concise hero/villain ranges at key nodes, with blocker notes.
- 3. **Line selection**: best line + recommended sizes + the "why" (value/bluff mix, range/nut advantage, exploit vs. GTO).

- 4. **Alternatives**: plausible second-best lines and typical population exploits.
- 5. Common leaks flagged: 1–3 bullets.
- 6. Actionable drill: a short drill tied to this spot.

Each hand also gets a human-readable **ID** (e.g., RS-2025-08-20-BTNvBB-SRP-LowBoard-001) and **1-3** tags (e.g., SRP, 3BP, probe). These appear in your Progress Record too.

## Modes and depth controls

• Coach mode:

**GTO** (equilibrium, minimal exploits), **Exploit** (population-based deviations; assumptions stated), or **Hybrid** (default). Switch anytime with: coach mode: GTO | Exploit | Hybrid.

Response depth:

Set brevity: tight | normal | deep-dive and math mode: light | full to control verbosity and math detail. Acknowledge once; settings apply immediately.

## **Progress tracking & downloads**

- **Study Summary** ask "produce a study summary" to download PokerStudy\_{YYYY-MM-DD}.txt with session takeaways.
- Progress Record ask "save progress / generate progress record" to receive (a) a JSON record
  (RangeSage.ProgressRecord.v1) and (b) a concise Markdown record; you'll also be offered
  RangeSage\_Progress\_{YYYY-MM-DD}.txt. Keep and paste the JSON at your next session to
  maintain continuity.
- **Leak Tracker** a lightweight log (JSON + Markdown table) with title, severity, evidence (hand IDs), fix plan, drills, status, and next review date.
- Competency Snapshot 1–5 ratings by topic (e.g., preflop open/defend, 3-bet pots, c-bet sizing, turn
  probes, river bluffing, bluff-catch frequency, bet sizing discipline) with last-updated dates, stored inside
  Progress Records.

**Hand IDs & tags** are included in both the analysis and your Progress Record.

#### **Practice modes**

• Range reps — "range reps on <spot>" to get 3-minute single-node drills tied to your current leaks, with targets (e.g., 10 combos) and recommended mixes.

Quizzes — "quiz me" to get a short, targeted quiz derived from the most recent topics and learnings.

# **Troubleshooting PHH**

If Range Sage flags your hand, check: players vs. seat\_count, stacks/blinds present, that min\_bet matches stakes, that cards are unique/valid, and that actions are legal given prior actions. Fix and resend.

When fields are missing, Range Sage asks one concise question or proceeds with clear assumptions rather than stalling.

#### **FAQ**

**Can I analyze multiple hands at once?** Yes—paste several PHH hands separated by lines (or upload a .phh/.phhs bundle).

**Can Range Sage handle PLO or other variants?** No. Range Sage is NLHE-only and will redirect you back to Hold'em concepts.

Where do the recommendations come from? Can you show the sources? Range Sage draws on its internal knowledge base and won't reveal file names or quote raw sources; it paraphrases while preserving meaning. If asked, it will answer "my internal knowledge base."

What files can I download? Study summaries (PokerStudy\_YYYY-MM-DD.txt) and progress logs (RangeSage\_Progress\_YYYY-MM-DD.txt). Keep these locally.

**How do I keep continuity between sessions?** Paste your last progress\_record\_json at the start of a new session; Range Sage adapts depth and drills based on it.

## Tips & best practices

- Tell Range Sage your **stakes/pool** and **focus** at the start so it can tailor depth and exploits.
- Use Hybrid mode unless you have a strong reason to go pure GTO or Exploit. You'll get a stable baseline plus transparent deviations.
- Use **tight brevity** when you want quick answers and **deep-dive** when studying. Pair with **math\_mode**: **full** for more quantitative detail.
- Keep your Progress Record JSON handy; it's your portable memory between sessions.

# Glossary (mini)

- PHH Poker Hand History format (TOML); the authoritative way to share hands with Range Sage.
- **SPR** Stack-to-Pot Ratio; used to contextualize commitment and sizing by street. Appears in the Snapshot section of analyses.
- **GTO / Exploit / Hybrid** Coaching styles that determine the baseline strategy and whether population deviations are applied.
- Leak Tracker A running list of your systematic mistakes, with evidence, severity, and a plan to fix them.

### Recognized commands (for quick reference)

- "produce/create a study summary" → Download PokerStudy\_{YYYY-MM-DD}.txt.
- "save progress / generate progress record / session record / progress log" → Output JSON + Markdown; download RangeSage\_Progress\_{YYYY-MM-DD}.txt.
- "analyze these hands" → Parse PHH and return analysis.
- "quiz me" → Short targeted quiz.
- "assign drills" → 3–5 drills tied to your leaks and next\_focus.
- "coach mode: GTO | Exploit | Hybrid" → Switch coaching style.
- "brevity: tight/normal/deep-dive"; "math mode: light/full" → Adjust depth.
- "show leak tracker" → Current table + JSON.
- "range reps on <spot>" → Generate a micro-drill.
- "competency snapshot" → Ratings + next focus.