

## What to Ask User on Sign-Up (and Later)

When a new user signs up (or first uses the cycle tracker), ask a small, structured **onboarding questionnaire**. These questions let you build a baseline model and personalize predictions.

### Onboarding Questions:

1. **First day of last menstrual period** — date (DD-MM-YYYY)
2. **Typical cycle length / usual length of your cycle** (in days)
  - Provide options: 21–25, 26–30, 31–35, 36–40, >40, Very irregular / I don't know
3. **Typical period duration** (i.e. how many days does bleeding usually last)
  - Options: 2–4 days, 5–7 days, 8+ days, Very irregular
4. **Do your cycles vary significantly in length from month to month?**
  - Options: Rarely / Sometimes / Often / Always irregular
5. **Do you have any of these conditions?** (multiple select)
  - Polycystic Ovary Syndrome (PCOS) / PCOD
  - Hormonal imbalance (thyroid, etc.)
  - Currently pregnant or trying to conceive
  - On hormonal birth control / IUD / contraceptives
  - Menopause / perimenopause / approaching menopause
  - Prefer not to say / none of these
6. **Do you track or know about other fertility signs?** (optional)
  - Basal body temperature (BBT) tracking
  - Cervical mucus tracking
  - Ovulation kit use (LH surge test)

- None
7. **Do you want to track symptoms / moods / cravings / pain / other health indicators?**
- Yes / No / Maybe
8. **Would you like the app to adjust predictions dynamically (with buffer) rather than fixed 28-day cycles?**
- Yes / No / I'm not sure
9. (Optional) **Typical lifestyle factors**
- Stress level (low / medium / high)
  - Sleep pattern (regular / irregular)
  - Known health conditions (diabetes, thyroid, etc.)
  - Helps in advanced personalization later



## How to Use These Answers to Allocate Days / Calendar Phases

Once onboarding is done, your backend can compute a **baseline cycle model** for that user. Here's how:

- Use “**typical cycle length**” as the base — but treat it as a **mean**, not a fixed number.
- Use “**variability**” answer: if user says “often irregular / always irregular”, mark their cycle as “**flexible**” and show **ranges** instead of fixed dates.
- For **period duration**, use their own data to mark “bleeding window.”



## How to Show Calendar + Phases

1. **Calendar View with Range-Based Predictions**

- Instead of marking exactly “Period: Day 1–5, Next Period: 28 Nov”, show something like:  
**“Expected next period: 25–31 Nov (± 3 days buffer)”**
  - Use shading (light color) for buffer days to signal uncertainty.
2. **Phases (Menstrual / Follicular / Ovulation / Luteal)** based on average cycle length — but with buffers. For example:
- If user’s average cycle is 30 days:
    - Menstrual → Day 1–5 (based on user’s period duration)
    - Follicular → Day 6–13 (or until ~40% of cycle)
    - Ovulation window → Day 14–18 (or +/- 2 days) — include buffer
    - Luteal → Remaining days until next predicted bleed (with buffer)
3. **If user marks “irregular” or has PCOS / long cycles (>35–40 days):**
- Do **not** assign strict ovulation or luteal windows — rather show **“Likely period range”**.
  - Use historical data to adjust predictions over time (after 2–3 cycles). This helps accommodate irregularity, a common feature in conditions like PCOS. [Mayo Clinic+2PubMed Central+2](#)
4. **For pregnancy mode / TTC (trying to conceive) mode / contraception mode:**
- Allow user to toggle a “Pregnancy / TTC / Contraception” mode in settings — this changes how predictions are shown (fertile window, ovulation focus, etc.)
  - If user is pregnant: disable cycle prediction until postpartum

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## **How to Adapt for Conditions: PMS, PCOS/PCOD, Pregnancy, Menopause, Irregular Cycles**

Your app should treat different “profiles” differently.

## ● For users with PCOS / Irregular Cycles

- Mark cycle as “**irregular mode**”
- Use historical data (last 3–6 cycles) to **compute an average and a variance** — and always show “**range predictions**”, not exact dates.
- Inform user via UI: e.g. “Since your cycles vary, predictions are approximate.” (this aligns with research: many with irregular cycles benefit from tracking but predictions for ovulation may be unreliable) [Ro+1](#)

## ● For users tracking fertility / pregnancy / TTC

- Use user input to enable **fertility mode**.
- Provide optional tools (BBT logging, ovulation predictor reminders) — but clearly indicate these are **not guarantees**, just supportive aids.

## ● For users with regular cycles & no conditions (normal flow)

- Use their typical cycle length as base, but show a **buffer range** — give flexibility (because even “normal” cycles can vary from cycle to cycle). Research shows **normal variation ~21–35 days** is acceptable. [Cleveland Clinic+1](#)
- This reduces “pressure” — avoids the myth of strict 28-day cycle, makes user feel more “normal” even if cycle varies.

## ⚠ For menopause / perimenopause / hormonally active phases

- Provide a “Menopause / Perimenopause / Transition mode” where predictions are disabled or treated as “very uncertain.”
- Provide educational content instead (symptoms, wellness tips for menopause).

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### ONBOARDING QUESTIONS:

1. What is the date of the first day of your last period? (DD-MM-YYYY)

2. What is your usual cycle length? (Select: 21–25 / 26–30 / 31–35 / 36–40 / >40 / Very irregular / Don't know)
3. How many days does your period usually last? (2–4 / 5–7 / 8+ / Very irregular)
4. Do your cycles vary month to month? (Rarely / Sometimes / Often / Always irregular)
5. Do you have any of these conditions? (Multi-select: PCOS/PCOD, Hormonal imbalance, Pregnant/TTC, On contraceptives, Menopause/Perimenopause, None)
6. Do you track fertility signs? (BBT / Cervical mucus / Ovulation kit / None)
7. Do you want to track symptoms & moods? (Yes / No / Maybe)
8. Would you like cycle predictions to show a date range (with buffer) rather than fixed dates? (Yes / No / Not sure)
9. (Optional) Lifestyle snapshot: Stress level, sleep pattern, known health issues.

#### LOGIC FOR CALENDAR & PHASE ALLOCATION:

- base\_cycle\_length = user's typical cycle length (if user selected "regular")
- if user marked "irregular" or selected >35 days or PCOS: mark cycle\_type = "irregular"
- For regular cycles:
  - compute phases:
    - \* Menstrual: period\_duration days
    - \* Follicular: until ~40% of cycle (after bleeding)
    - \* Ovulation window: middle 10–20% of remaining cycle (with  $\pm 2$ -3 day buffer)
    - \* Luteal: remaining days until next expected bleed (with buffer  $\pm 2$ -3 days)
- For irregular / PCOS / long cycles:
  - do not show ovulation/ luteal windows
  - show next period as \*\*"Expected between [date1] and [date2]"\*\* based on avg + variance of last 3–6 cycles
  - update predictions every new cycle (learn over time)

#### UI DISPLAY:

- Calendar with shading for:
  - \* Bleeding days (period)
  - \* Predicted phase windows (with buffer shading)
  - \* Buffer days (lighter shading) indicating uncertainty
- When user logs symptoms / moods / health data — store and use for future predictions / insights
- Education tab / mode for special cases (PCOS, TTC, Menopause) — disable rigid predictions, show wellness advice

#### PROFILE MODES:

- Regular cycle mode
- Irregular / PCOS mode
- TTC / Fertility / Pregnancy mode
- Menopause / Perimenopause mode

#### NOTES:

- Always show disclaimers that predictions are approximate, not medical advice
- Encourage consistent logging for better predictions