Type: Interval, Long run (or just run) and race. All of these could structurally be equal considering Warmup and cooldown are the only extra parts added for intervals, and thus could be left as optional values for those type of workouts.

I want every workout to be flexible to solve these cases:

* When a user signs in and wants to create a running plan, I want to create the plan based on how much the user is willing to put in for total distance (km or miles) per week.
* I want to create a formula that allows a user to run more threshold / intensive work when weekly distance is low. For example, if you’re not willing to run more than 20 km a week, then I think two interval sessions is fine and one easy run for instance.

Examples of workouts:

- 8 \* 1000 meters (1 min break in between, could be changed into as many laps as you prefer)

- 45 / 15 \* 30 (45 seconds running)

- 6 \* 6 minutes running (or 5 \* 6 minutes or even 4 \* 6 minutes) based on how much your total threshold in terms of length and speed should be for the whole week.

- 10 \* 3 minutes (1 min break). Could be More or fewer laps.

- Combi workout: 2 \* 6 min (2 min breaks in between) + 4 \* 3 minutes (1 min breaks in between) and 4 \* 1 minutes (one min break in between)

- Hill repeats: 15 \* 1 minutes (find a semi-steep hill). Run down slowly between each repeat.

- 10 \* 1 minute (\* 3, 3 minutes break between each set. Could be repeated twice or once instead of doing three repeats of the 10 \* 1 minutes)

- 3 \* 3000 meter (2 minute breaks)

- 5 \* (3, 2, 1 minutes). 1 minute break in between each interval.

- 5 \* 2000 meter (or fewer laps, 1 minute 30 seconds breaks, dynamic number of intervals)

- Easy run: anything between 30 minutes and 1:15 minutes, anything longer could be a long run.

- Long run: 1 hour 20 minutes ++ up to 3 hours depending on what you’re training for.

- Strength: Encourage strength training at least once a week, or twice a week “off season”.

- 14-22 \* 1 minute and 30 seconds (speed work), 1 minute break

- 7 \* 5 minutes, 1 minute and 30 seconds break

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For flexibility reasons – when a user has created a training plan that lasts for 9 weeks, I would like the user to easily be able to swap any interval workouts or easy runs to any one of the specific listed workouts listed above (working examples) and be able to swap which day of the week they’d like to do the activity. This is important for people with busy schedules. The only rule here is to always have one easy run or off day between each interval session. And a simple rule is also to keep a maximum of three hard workouts per week.

How do I start designing this code wise? On database level or just implementing an algorithm for it, and in any case, do you have an example for it algorithm wise?

## Algorithm

* Monday always easy run
* Sunday always long run
* Always one day break in between interval sessions