

Franklin Marathon Software Project

The Franklin Marathon is an annual event with four different races held over a two-day period during the first full weekend of May. To encourage early registration, the price of the race increases as the race date approaches. Registration opens each year on October 1st. Here is the price schedule for each race:

Super Early Registration (\$20 off)

Available from October 1st through October 31st

Full Marathon: \$75

Half Marathon: \$65

10K: \$50

5K: \$30

Early Registration (\$10 off the 5K; \$15 off all other races)

Available from November 1st through the last day of February

Full Marathon: \$80

Half Marathon: \$70

10K: \$55

5K: \$40

Baseline Registration

Available from March 1st through April 1st

Full Marathon: \$95

Half Marathon: \$85

10K: \$70

5K: \$50

Late Registration (+\$19 for the 10K; +\$14 for all other races)

Available from April 2nd until the Thursday before the race weekend

Full Marathon: \$109

Half Marathon: \$99

10K: \$89

5K: \$64

The 5K and 10K runs are held on Saturday; the full and half marathons are held on Sunday. This allows runners to register for an event on both days. This is known as “bundling” and runners who bundle get 20% off the combined registration rates when they register for both events at the same time.

Runners who are 65 and older at the time of registration get a \$5 discount on a single-race registration, and an additional \$10 off a bundled registration rate.

For this project, your job is to write the acceptance test plan (not the software – just the test plan for the software) that will *verify that the registration amount to be charged, given the date of the registration and the racer's chosen distance(s), is accurate.*

To do this, you will first write the requirements for your project. (Hint: If you do your requirements correctly, you will need more than the registration date and the chosen race(s) for the runner.) Then, in accordance with the V-Model, you will write the acceptance test plan based on the system requirements. Note: You should plan to use equivalence class partitioning and boundary testing in your test plan.

Milestones for this project:

- HW2. Write the project requirements. (Due on Tue, 23 Sep)
- Proj 2. Write the test plan for the requirements (Due on Tue, 7 Oct)
- Note: Do not start working on Project 2 before Tue, 30 Sep.
(We will do a “requirements baseline” in class on Mon, 29 Sep)

Remember, most software requirements contain the phrase, “The system shall...”