To guide users in competitive programming

CodeRangers was designed to provide users with an environment that will guide users in competitive programming. These are done via gamification, to further increase user motivation and retention. The gamification elements used in the system are skills, badges, experience points, and leaderboards.

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AndiBanana

Abejuro, Christian Kiel P.
Cua, Sean Felix T.
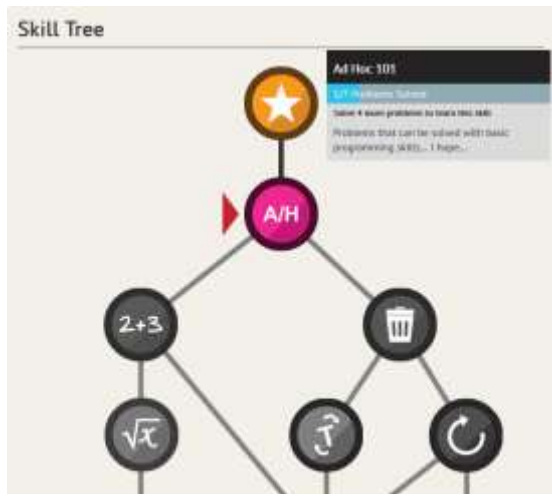Go, Matthew Allen S.
Soriano, Juan Miguel B.

Tiam-Lee, Thomas James

CodeRangers

A Gamified Structured Learning Environment for Competitive Programming

// CODE RANGERS
ONLINE JUDGE

Save the world, learn how to code.

Skill Tree

A skill tree is used in the system in order to facilitate the learning of the users. This is done by giving them paths and determine whether what skills they should learn and further specialize in.

Skills can be mastered by solving all the problems under it, while they can be learned by solving a certain amount of problems in the skill.

In order to solve problems in skills connected to skills above, the parent nodes should first be learned.

Badges

Badges are achievements earned by learning and mastering skills. These serve as a user's bragging rights that they have learned or mastered the skills. Badges are shown in a user's profile page and unearned ones are also shown here.

Experience Points

Experience points are received by solving problems. For each problem that a user solves, the difficulty of that problem is added to their experience. A user gets another level for every 30 experience points received. An avatar is provided by the system depending on the level of the user.