Reboot SY 2024 - 2025

**Organizers' Kickoff Meeting** 

1. Goals for Next SY

- 1. Goals for Next SY
- 2. Current CompProg Curriculum

- 1. Goals for Next SY
- 2. Current CompProg Curriculum
- 3. CompProg Training Format

- 1. Goals for Next SY
- 2. Current CompProg Curriculum
- 3. CompProg Training Format
- 4. Possible Roles to Fill

- 1. Goals for Next SY
- 2. Current CompProg Curriculum
- 3. CompProg Training Format
- 4. Possible Roles to Fill
- 5. SoftDev

- 1. Goals for Next SY
- 2. Current CompProg Curriculum
- 3. CompProg Training Format
- 4. Possible Roles to Fill
- 5. SoftDev
- 6. Other Roles to Fill?

- 1. Goals for Next SY
- 2. Current CompProg Curriculum
- 3. CompProg Training Format
- 4. Possible Roles to Fill
- 5. SoftDev
- 6. Other Roles to Fill?
- 7. Other Concerns/Clarifications/Suggestions

Reboot 2024 12

1. Establish clearer roles for organizers

- 1. Establish clearer roles for organizers
- 2. Establish a **simple yet consistent** training routine that requires the right amount of effort for both organizers and students

- 1. Establish clearer roles for organizers
- 2. Establish a **simple yet consistent** training routine that requires the right amount of effort for both organizers and students
- 3. For CompProg: pilot an experimental year-long curriculum for learning CompProg

- 1. Establish clearer roles for organizers
- 2. Establish a **simple yet consistent** training routine that requires the right amount of effort for both organizers and students
- 3. For CompProg: pilot an experimental year-long curriculum for learning CompProg
- 4. For SoftDev: find some training structure that works for both organizers and students. A curriculum would help!

### We have a Reboot Website!

https://redblazerflame.github.io/reboot-materials

**GitHub:** 

https://github.com/RedBlazerFlame/rebootmaterials

- To be split into two tracks: Bootcamp and Veteran (patterned after NOI.PH's training format)
- Bootcamp: https://redblazerflame.github.io/reboot-materials/compprogmaterials/bootcamp/
- Veteran: https://redblazerflame.github.io/reboot-materials/compprogmaterials/veteran/

### **Bootcamp**

- 1. Intro to CompProg
- 2. Intro to C++: Functions, STL features like Vectors and Pairs, Implementation
- 3. **Basic Algorithms:** Brute Force, Complete Search, Sorting, Prefix Sums, Binary Search, Brute Force with Bitmasks and Recursion
- 4. Basic Data Structures: Priority Queue, Set, Multiset, Map
- 5. **Math:** Modular Arithmetic, Combinatorics (Combi), Dynamic Programming (DP), Greedy Algorithms
- 6. Basic Graph Theory: Intro to Graphs, Traversals, and Shortest Paths

#### Veteran

- 1. Intro to CompProg
- 2. **Math and Complete Search:** Dynamic Programming (DP), Greedy, Proving Greedy Algorithms, Combinatorics (Combi), Number Theory (NT)
- 3. **Graph Theory:** Traversals, Shortest Paths, Connected Components and Transitive Closures
- 4. **Advanced Data Structures and Algorithms:** Segment Trees, Lazy Propagation, Tree Flattening, LCA with Binary Lifting, SQRT Decomposition
- 5. Problem Setting

- 1. **Bootcamp:** For newcomers aiming for NOI.PH Finals
- 2. **Veteran:** For NOI.PH Finalists aiming for the International Olympiad in Informatics (IOI)

Reboot 2024 2

#### For CompProg

- Weekly synchronous 1 hour meetings, meant to serve as introductory lectures to the topic of the week
- 5-6 hours of asynchronous solving per week (with one weekly progress report to introduce accountability in training)

#### For CompProg

- Weekly synchronous 1 hour meetings, meant to serve as introductory lectures to the topic of the week
- 5-6 hours of asynchronous solving per week (with one weekly progress report to introduce accountability in training)

#### For SoftDev

- No plans yet
- For Reboot SoftDev Trainers, it'll help to come up with a plan for SoftDev ^^

### **CompProg**

- Materials will be on the Reboot Website
- Submissions will be on **KHub** (Sir Roy will set up a KHub course for Reboot)

- Roles are NOT mutually exclusive -- I encourage you to volunteer for multiple roles
- Feel free to volunteer yourself or suggest other roles that we may have missed

#### 1. Module Writers

- Write simple slides to synthesize the topic for the week (show examples)
  - Recommendation for making slides: Use the MARP template found in the Reboot Materials GitHub (see the test-slides folder)
- Find **problems** to help the students apply their knowledge per week (show examples)

Reboot 2024 29

#### 1. Module Writers

- Write simple slides to synthesize the topic for the week (show examples)
  - Recommendation for making slides: Use the MARP template found in the Reboot Materials GitHub (see the test-slides folder)
- Find **problems** to help the students apply their knowledge per week (show examples)

#### 2. Trainers

 Meet with the students weekly in the synchronous sessions and answer students' questions in the Discord when you're available

Reboot 2024 30

#### 3. Externals

- a. Pubmats
- b. Announcements

- 3. Externals
  - a. Pubmats
  - b. Announcements
- 4. **Creatives** (Could be merged with Externals, but based on experience in PCPC, this tends to overload externals)
  - a. Branding
  - b. Other Creative Work for Reboot

#### 3. Externals

- a. Pubmats
- b. Announcements
- 4. **Creatives** (Could be merged with Externals, but based on experience in PCPC, this tends to overload externals)
  - a. Branding
  - b. Other Creative Work for Reboot

#### 5. Internals

- a. Logistics
- b. Paperwork

### **SoftDev**

The Elephant in the Room

### **SoftDev**

- A curriculum (or at least a general "training" format) is needed
- For SoftDevvers, feel free to self-organize and assign roles among yourselves (wow, Agile Scrum)
- I will delegate this to other organizers (if you want to volunteer, message nalang sa Discord, haha ^^)

# **Any More Divisions/Roles to Fill?**

# Other Concerns/Clarifications/Suggestions?

### **Thank You!**

**Have a Good Summer!** 



# Follow your Dreams 🐎



Reboot 2024

# P.S., Surprise Surprise this Slideshow was Crammed in 1.5 Hours!

This is the true power of MARP