



2023

SCIENCE AND TECH COMMITTEE HEAD PLAN

Open Source Community OSC

PRESENTED BY

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Level 3 CS Student

21/22' Science and Tech Ex Vice head

MISSION

Creating a team of highly skilled Software Engineers who are able to develop well architected software and able to represent FCIS ASU and OSC in any contests or Hackathons

VISION

Being tech agnostic while focusing on the core scientific concepts can help making the best use of the available technologies by pushing them to thier true limits while getting the most possible performance and efficiency, and this is exactly why Science and Tech Committee exists.



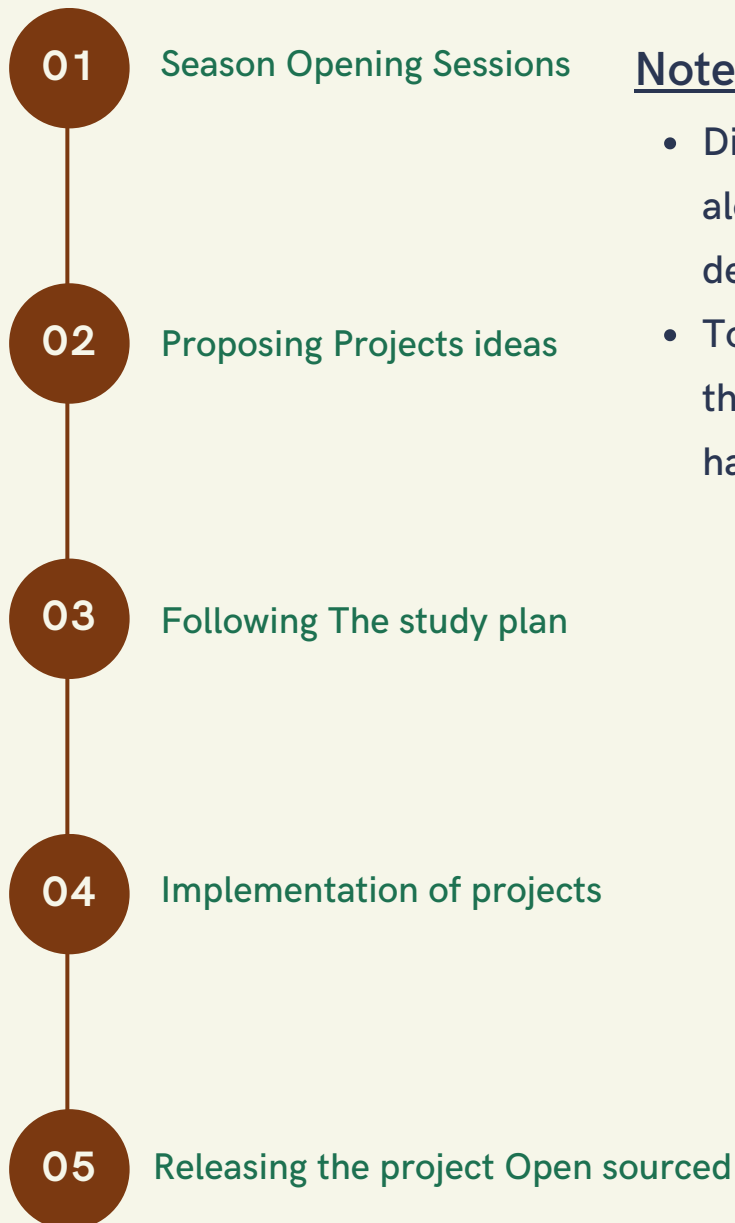
SEASON DELIVERABLES

For 2023 season

- Weekly online sessions in which:
 - Members and Head / Vices discuss and study advanced topics in software development like : Design and Architectural patterns - probabilistic data structures - Algorithms or some chapters from technical books.
 - The session speakers will be turn based, Members will be divided into small groups and prepare the content and presentation to be discussed during the next week's session.
 - Non-presenting students can ask the presenters in the details of the discussion topic
- At least 2 Major projects
 - Members and heads will choose 2 projects ideas and put their requirements.
 - Members will be divided into a team per each project and each team will have a leader Head or Vice.
 - Projects will be released in an Open source manner by the end of the season.
- Participate in hackathons and programming contests

TIMELINE

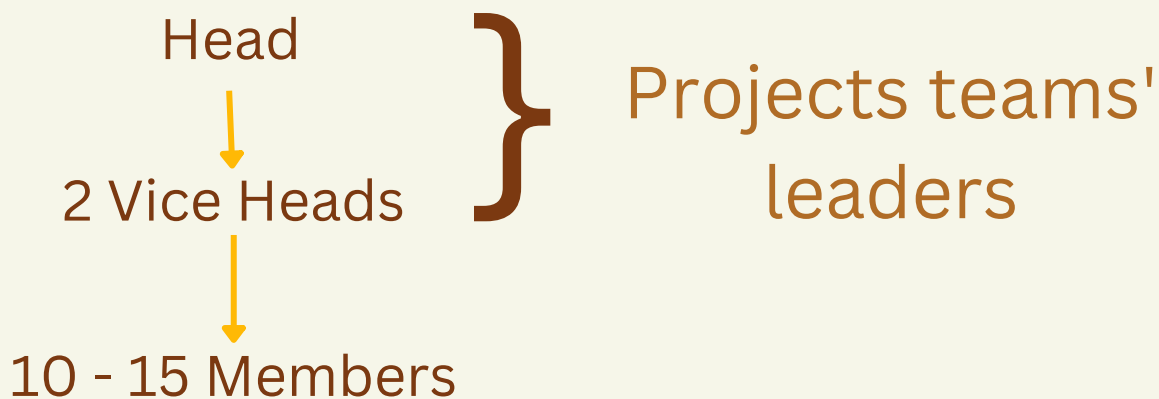
For 2023 season



Note :

- Discussion sessions will be held alongside the projects' development process.
- Top performing member will have the priority to participate in hackathons

EXPECTED COMMITTEE STRUCTURE



INTERVIEW REQUIREMENTS

- Solid understanding of all OOP concepts
- Excellent with data structures
- Problem solving skills
- Capable of writing clean code
- Knowledge in a major Object oriented language
- Experience with any technology is a huge plus

RULES

- Members must respect and help each other.
- Meetings should be attended on time.
- If a member will not be able to attend a session the head and HR should be notified with their excuse.
- Tasks must be done on time and meet all requirements.

DEALING WITH OTHER COMMITTEES

- **Web, Linux & Flutter:**
 - Technical committees' members can participate in projects related to their committees
- **Arts:**
 - Arts committee's members can help in designing the UI/UX elements in our projects

EXPECTED EVENTS

- **The Art of Design Patterns**
 - an in depth explanation of SOLID principles, Design / Architectural patterns and their real life use cases
- **The DS Clash**
 - Data structures based problem solving contest

SWOT ANALYSIS OF PREVIOUS SEASON

INTERNAL	STRENGTHS <ul style="list-style-type: none">• Heads and Vices showed solid technical skills• Members were cooperative and freindly• Committee gained a good reputation and fame after winning Benha University's smart cities Hackathon	WEAKNESSES <ul style="list-style-type: none">• Time management could be improved• The art of databases structures event had poor sound quality for the attendees
	OPPORTUNITIES <ul style="list-style-type: none">• Hard technical interviews landed some skilled members with a great potential to make the community better.	THREATS <ul style="list-style-type: none">• Narrow time frame for the last 2 projects added a high pressure on the team leaders
EXTERNAL		

PUNISHMENT & REWARD SYSTEM

- Each month the best performing member of each team:
 - will receive a simple reward like a certificate
 - His photo will be posted on the OSC's page
- Three alerts policy:
 - First unexcused absence from a meeting will receive first alert
 - Second time the member will receive a second alert and be disqualified from the current month's reward
 - Third alert means that the Head and Hr will discuss whether to remove this member or give him one last chance