

# Crescendo 2019

## Rulebook

1. **Event Name:** Counter Strike (Lan Gaming)  
**Council Name:** Computer Society Of India

- Knockout Style Tournament
- Version: Counter-strike 1.6
- 2-minute Round
- Half: 6 Rounds Of Play On A Defending Or Offensive Side
- Half Time: The Period Between Halves In Which Teams Swap Sides
- Match: First Team To Win 7 Total Rounds, Or The Single Overtime Round
- Overtime: In The Case Of A 6-6 Score At The End Of Regulation Play, An Overtime Single Round Of Knifing Will Decide Winner
- Side Selection: Coin Toss

### Game Format

- Competition Method: 5 Vs. 5
- Players: 10 (5 On Each Team)
- Rounds: 12 Rounds For Regulation Play
- Max Rounds Format: 6 Rounds As Terrorist, And 6 Rounds As Counter-terrorist Per Team Until The Victory Condition Is Met
- Victory Condition: The First Team To Win 7 Rounds In Regulation Or The Team That Wins The Overtime Period.
- Buy-time: 15 Seconds
- Start Money: \$800 For Regulation Play
- Freeze-time: 15 Seconds
- C4 Timer: 35 Seconds

2. **Event Name:** Code Swapping  
**Council Name:** Computer Society Of India

- Each Team Will Be Provided 2 Systems And 2 Problem Statements.
- Communication Of Any Sort Between The Members After Problem Statements Have Been Provided Is Not Allowed.
- One Problem Statement To Be Solved On One System Respectively.
- Team Members Have To Swap Systems Every 30 Seconds.
- Resources Like Internet Etc. Will Not Be Allowed To Be Used.
- The Codes Would Be Written In C/C++/Java/Python (Based On Participant)
- Any Malpractice Would Lead To Straight Disqualification.

**3. Event Name: Capture The Flag**

**Council Name: Mozilla Campus Club**

- The contestants (10 in a batch) will be given set of four problem statements to debug. They have to solve it in 45 minutes.
- The time will be recorded and according to the time they will get corresponding points.
- At the end of second day (i.e. around 1:00pm), the top 10 contestants will debug another set of 4 codes within one hr and then finally winner and the runner-up will be declared.

**4. Event Name: Image Capture**

**Council Name: Mozilla Campus Club**

- The contestants (10 in a batch) will be given the sufficient amount of hints to find out the required image.
- The maximum time they can take is 8 minutes.
- The scores will be recorded according to the time taken by them.
- At the end of 2<sup>nd</sup> day, the contestant who captures the image with minimum time shall be declared as the winner.

**5. Event Name: Technotalks**

**Council Name: IIIExCRCE**

- A Team Can Have Minimum 2 And Maximum 4 Members
- Each Team Will Be Given 2 And A Half Hours To Find A Solution.
- The Use Of Mobile Phone And Internet Is Prohibited
- The Problem Selection Will Be On Chit Basis. Teams Cannot Interchange Their Problem Statement. If Any Team Wishes To Change Their Problem Statement, They Can Do So Only In The First 20 Minutes Of The Allotted Time.
- If Any Team Comes Late, They Will Be Given Only 10% Of The Delay As Extra Time (For Example: - If A Team Comes 10 Minutes Late, They Will Be Given 1-minute Extra Time)

**6. Event Name: Paper Planes**

**Council Name: IIIExCRCE**

- Participants Will Be Given One Sheet Of Paper Out Of Which To Make A Paper Plane That Will Complete All The Tasks.
- A Maximum Of 30 Seconds Will Be Provided Before Each Task If The Participants Wish To Tweak Their Planes.
- One Minute Will Be Provided To Make The Initial Paper Plane.

**Tasks To Be Completed:**

- Landing Inside A Designated Landing Area.
- Passing Through A Hoop.
- Longest Distance Travelled.
- Longest Air Time Achieved

**7. Event Name:** Fast The Fasteners

**Council Name:** SAE

- Type Of Participation: - Individual Entry.
- The Player Capable Of Assembling Maximum Number Of Fasteners In One Minute Will Be Declared As The Winner.
- In Case Of A Draw The Organizers Will Place A Certain Number Of Fasteners To Assemble In Minimum Time.
- Every Fastener Assembly Should Be Fastened Till The Final Thread Till The Head Of The Bolt.
- In Case Of Any Dispute The Decision Of The Organizers Will Be Fine.

**8. Event Name:** Re-search The Research

**Council Name:** SAE

- Participation Type: - Maximum Group Of 3
- Participants Will Be Given Research Papers On A Topic To Read And Summarize Them In A Form Of Powerpoint Presentation.
- Maximum Number Of Slides: - 5 + 1(Title)
- Participants Can Choose Topics From The Available Set As Per Their Field Of Interest.
- Points For The Presentation Will Be Decided By The Faculty Members.
- In Case Of Any Dispute The Decision Of The Organizers Will Be Final.

**9. Event Name:** Webmaster

**Council Name:** ACM Student Chapter Of Fr. Crce

- Total Time: 1 Hour (60 Minutes)
- Only Front-end Has To Be Developed.
- Single (Individual) Participant
- Each Batch Will Have 20 Students And Every Student Will Be Given The Same Problem Statement In Each Batch.
- There Will Be Only One Student Who Qualifies For Finals From Each Batch If He Completes The Problem Statement The Fastest.
- The Winner Will Then Be Decided From The Final Round Where All The Qualifiers Of All Batches Compete Together With Greater Complexity.

**10. Event Name:** Linux Master

**Council Name:** ACM Student Chapter Of Fr. Crce

- Total Time: 30 Minutes
- Team Of 2 Participants.
- Each Team Will Be Given Problem Statements With 3 Complexities: Easy, Medium And Hard.
- Team Has To Complete All Problem Statements Within The Given Time (30 Minutes).
- The Output Should Match With The Correct Expected Output.
- Team Has To Create A Separate File (.txt) To Store The Output That They Have Obtained.
- The Team Which Completes The Task The Fastest With The Correct Output Is The Winner.

**11. Event Name:** Blind Coding

**Council Name:** Codelabs CRCE

- Participants Will Be Given Problem Statements Randomly.
- Problem Statements Will Be Of Simple Category.
- Any Standard Programming Languages Can Be Used To Code. (C, C++, Java, Python, Etc.)
- Participant Cannot Have A Pen, Book Or Any Stationery With Them While Coding.
- Monitor Screen Will Be Turned Off As The Time Starts.
- Participants Can Opt For Screen-on For 30 seconds With A Penalty Of 30 Seconds In Time.
- The Code Will Be Evaluated After The Participants Claims To Have Finished The Solution And If The Solution Is Found Wrong 30 Seconds Penalty Will Be Added To The Total Time.
- Participants Whose Code Gets Executed Will Be Given Higher Preference.
- Participant Finishing In The Lowest Time Will Be The Winner.
- Any Participant Found To Be Indulging In Any Form Of Malpractice Will Be Immediately Disqualified.
- The Decision Of The Organizers In Declaring The Results Will Be Final. No Queries In This Regard Will Be Entertained.

**12. Event Name:** Quiz-Up

**Council Name:** American Society Of Mechanical Engineers

- The Person Who Answers Maximum Number Of Questions Rightly In The Least Time Is The Winner.

**13. Event Name:** Suspension Bridge

**Council Name:** American Society Of Mechanical Engineers

- Length Of The Bridge Should Not Exceed 1m And Should Not Be Less Than 70cm.
- Height Of The Bridge Should Not Be More Than Two Sticks Kept Vertically.
- Use Of External Materials Is Not Allowed. Participants Have To Use The Materials Provided.

**14. Event Name:** CAD Wars

**Council Name:** SME

- Duration: 45 Min
- In One Batch There Will Be 15 Participants
- Batches Will Be Decided On Number Of Registrations
- There Will Be Only One Round From Which Winner Will Be Decide.
- Problem Statement Will Be Given On The Spot.
- Based On The Problem Statement, Student Have To Design 2D, 3D Drawing On Cad Software (Solidworks, NX, Autocad).
- There Will Be Only One Round.

**15. Event Name:** Tech Pong

**Council Name:** SME

- Team Of 2 Students.
- Two Team Play Against Each Other.
- Time Duration For Each Game Is 5-7 Minutes.
- Maximum Chits Performed In Minimum Time Will Be Winner.

**16. Event Name:** PUBG Gaming

**Council Name:** Codelabs CRCE

- Participants Have To Bring Their Own Mobile Phone With The Updated Pubg Mobile Game.
- Any Participant Found To Be Indulging In Any Form Of Malpractice Will Be Immediately Disqualified.
- The Decision Of The Organizers In Declaring The Results Will Be Final. No Queries In This Regard Will Be Entertained.

**17. Event Name:** Escape Room

**Council Name:** TEDxCRCE

- The Game Can Be Played By A Single Player Or In A Team Of Two.
- In Case Of A Team, Both Players Have To Solve The Same Level At A Time.

- Every Level Has To Be Completed Successfully In Order To Escalate To The Next.
- There Will Be An Upper Time Limit To Complete All Tasks.
- If The Upper Time Limit Is Exceeded, Then The Player/Team Will Be Disqualified.
- Hints Will Be Provided At A Cost Of 30 Seconds, Which Will Be Added To The Final Time.
- The Winning Player/Team Will Be Decided On The Basis Of Minimum Time Taken To Complete All Levels.
- In Case Of Conflicts All Rights Are Reserved By Event In Charge/Judge.
- No Usage Of Smartphones/Internet Allowed.

#### 18. **Event Name:** Technical Project Competition

**Council Name:** IEEE

- Think Of An Innovative Idea And That Intrigues You The Most And start Planning For The Project Accordingly.
- Prepare An Abstract And The Documents Of The Given Format And submit The Same By The Given Deadline For Abstract Submission.
- Based On The Specific Judging Parameters And Considering The Difficulty Level, Novelty Of The Idea, Implementation & Feasibility A Selected No. Of Projects Will Be Selected For Display During Technical Project Competition. The List Of Selected Candidates Will Be Announced On The Day Of Intimation.
- Once Selected, The Participants Have To Pay The Registration Fee Before The Registration Deadline.
- The Winners Of The Exhibition Will Be Declared By The Judges Considering All Possible Aspects.

#### **Rules**

- Maximum Number Of Members Allowed In A Team Is 4 And Minimum 2 Members.
- Candidates Should Send The Abstract Of The Project And Its Details And With All The Details Of The Members Of Team Before The Deadline For Submission On The Email Mentioned.
- Spot Entries Are Not Allowed.
- Accepted Projects Will Be Intimated Through Their Respective Mail.Id By The Date Of Intimation
- Selected Candidates Should Bring Their Identity Card At The Day Of Event.
- Only Undergraduates Are Allowed To Participate
- In Case Of Any Conflicts The Decision Of The Judges Will Be Final
- Any Misconduct/Misbehaviour Will Lead To Disqualification Of Team.
- Ac Power Supplies And Equipments Would Be Provided. In Case Of Any Other Requirements It Should Be Intimated To Us 1 To 2 Week / A Prior To The Competition.

### **Judging Criteria**

- Winner Would Be Decided On The Basis Of Points Awarded To Each Team By Three Judges.
- The Judging Will Be Based On Novel Idea, Feasibility Of The Project, Implementation Etc.
- Decision Of The Judges Would Be Final.

### **Certificate Criteria**

- Participating Teams Will Get Certificate Of Participation.
- Winners Will Be Given Certificate Of Excellence.
- Teams Which Are Disqualified Will Not Receive Any Certificate.

### **Details For Abstract**

- Send Abstract to ieeecrce.24@gmail.com Only.
- Abstract Should Be Submitted In PDF Format Only.
- The Abstract Should Contain Not More Than 2000 Words.
- The Contents Of The Abstract Should Be As Follows:
  - Title
  - Introduction
  - Need/Motivation For Developing The Project
  - Working Principle
  - Mathematical/Graphical Support (If Any)
  - Simulations (If Any)
  - Observations/ Results
  - Existing Technologies (If Any)
  - Video/Picture
  - Feasibility
  - Reference
- Note: Please Send In The Following Details Along With Your Project.
  - Project Name
  - Members Name
  - Contact Number
  - Email-id
  - College Name
- Responses Without The Above Details Won't Be Accepted.

### **Deadlines**

- Deadline For Submission Of Abstract: March 10th,2019.
- Selection Of Projects & Intimation To Candidates: March 13th,2019.
- Registration Deadline: March 10th,2019.

## 19. Event Name: Line Follower Competition

Council Name: WIE

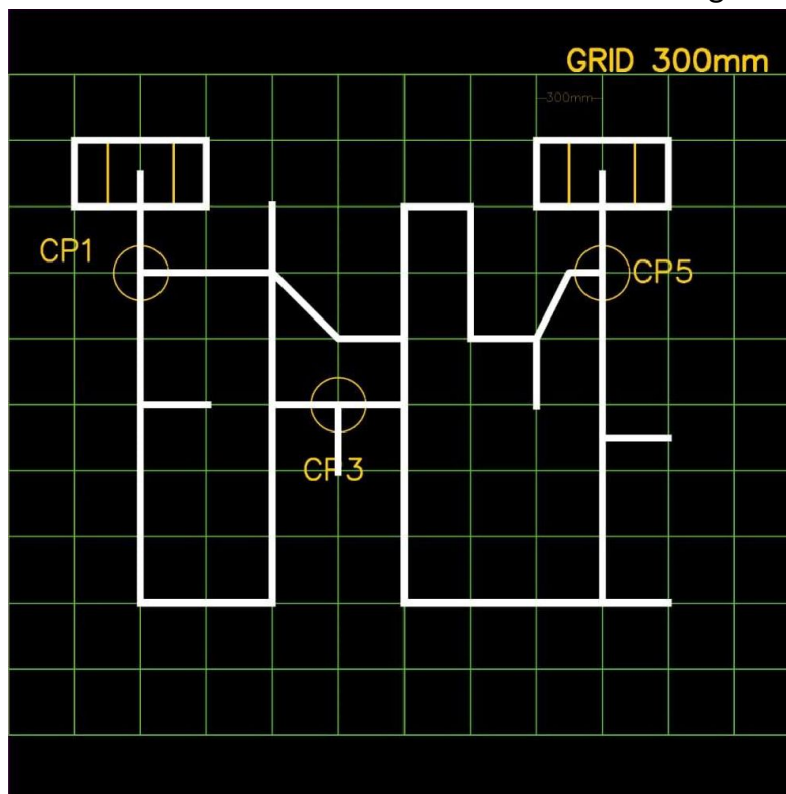
- Teams Have To Build An Autonomous Robot Which Can Follow A White Line And Keep Track Of Directions While Going Through The Maze.
- The Bot Has To Analyze The Path In The Dry Run And Has To Go Through The Maze From The Starting Point To The Ending Point In Minimum Possible Time.

### Arena

- The Arena Is Composed Of Random Paths Made Up Of White Vinyl Strips.
- All The Distances Are Shown In Figure.
- The Width Of All White Stripes Will Be 30mm.
- Note: The Dimensions Of The Arena Will Be Accurate To Within 5% Or 20 Mm, Whichever Is Less.

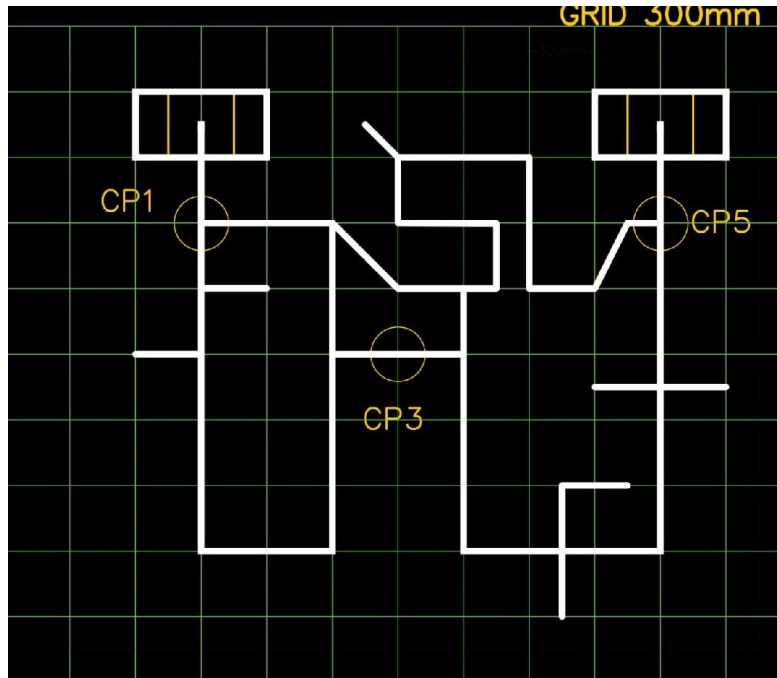
### Gameplay

- A Total Of 3 Minutes Will Be Provided To Complete The Run And One Minute For Calibration.
- The Robot Should Pass Through All The Checkpoints.
- Any Part Of The Robot Must Be Over The Line At Any Given Time.
- The Robot Must Follow At Least One Full Path During Run.



Qualifiers Layout





**Finals Layout**

### **Check Points**

- The Checkpoints Are Shown In Figure (There Would Not Be Any Circle In The Arena As Shown In Figure 3. They Are Used Only For Reference)
- Each Checkpoint Carries 5 Points.

### **Bot Specifications**

- The Autonomous Bot Must Fit Into The Box Of Dimension 220mm X 220mm X 220mm (lxbxh).
- Bot Must Be Started Individually By Only One Switch. However, A Team May Have An Onboard Switch For Restart. This Switch Has To Be Shown To The Organizer Before The Run.
- Bot Must Have A Red Led Which Will Glow Once It Reaches The End Zone Of The Arena.
- During The Run, The Autonomous Bot Must Not Damage The Arena In Any Way. It Is Not Allowed To Leave Anything Behind Or Make Any Marks While Traversing The Arena. Any Bot Found Damaging The Arena Will Be Immediately Disqualified. The Final Decision Is At The Discretion Of The Organizers.
- Bot Must Have 'on Board' Power Supply.
- When Using The Electric Power Supply, The Potential Difference Between Any 2 Points Must Not Exceed 24 V At Any Point Of Time During The Game.
- The Autonomous Bot Should Not Separate Or Split Into Two Or More Units. All Bots/Units Which Are Touching Each Other Or Are In The Starting Point Will Be Considered As One Bot.

- The Machine Cannot Be Constructed Using Readymade Kits Or Any Readymade Mechanism. But They Can Make Use Of Readymade Gear Assemblies. Violating This Clause Will Lead To Disqualification Of The Team

### **Game Rules**

- When The Autonomous Bot Starts, No Team Member Is Allowed To Touch The Bot Or Enter The Arena.
- At The Start Of The Task, The Bot Will Be Placed At The Starting Point. Only 1 Team Member Is Allowed To Be Near The Game Field While Starting The Bot.
- Run Will Start Only When Organizers Give The Signal.
- The Starting Procedure Of The Bot Should Be Simple And Should Not Involve Giving Bot, Any Manual Force Or Impulse In Any Direction.

### **Restarts**

- The Participants Are Allowed To Take A Maximum Of 3 Restarts In The Entire Match.
- If The Bot Takes A Restart In The Actual Run Of The Competition, It Has To Start From The Start Zone Of The Arena.
- The Timer Will Not Be Set Back To Zero And Will Not Be Paused In Any Case.
- Contestants Are Allowed To Adjust Sensors (Gain, Position Etc.) And Make Hardware Changes.
- The Contestant Must Not Alter The Bot In Any Manner That Reduces Its Weight (E.G. Removal Of A Bulky Sensor Array Or Switching To Lighter Batteries To Get Better Speed). The Organizers Reserve The Right To Arbitrate In Such Circumstances

### **General Rules**

- Only 1 Member Of The Team Is Allowed To Handle The Bot.
- Participants Are Not Allowed To Keep Anything Inside The Arena Other Than The Bot.
- Laptops/Personal Computers Are Not Allowed Near The Arena. Other Wi-fi, Bluetooth, Etc. Devices Must Be Switched Off. The Organizers Hold The Right To Check For These Devices And Their Usage And Disqualify The Team.
- The Time Measured By The Organizers Will Be Final And Will Be Used For Scoring The Teams.
- Time Measured By Any Contestant By Any Other Means Is Not Acceptable For Scoring.
- In Case Of Any Disputes/Discrepancies, The Organizers' Decision Will Be Final And Binding.
- The Organizers Reserve The Rights To Change Any Or All Of The Above Rules As They Deem Fit. Change In Rules, If Any Will Be Highlighted On The Website And Notified To The Registered Teams.
- Only One Team Is Allowed To Be Present During The Run, Other Teams Will Have To Stay Outside The Hall. No Team Is Allowed To Take Photograph Or Record Their Run.

### **Judging**

- 5 Points Will Be Awarded As It Crosses Any Of The Checkpoints But It Will Be Counted Only Once For Each Checkpoint.
- 10 Points Would Be Awarded If The Robot Reaches The End Point
- Glowing Of Led On Final Victory Will Be Treated As Absolute Victory And The Ties Would Be Resolved On Basis Of Time For Absolute Victory.

### **Team Specifications**

- A Team May Consist Of A Maximum Of 2 Participants. Students From Different Educational Institutes Can Form A Team.

### **Eligibility**

- All Students With A Valid Student Identity Card Of Their Respective Educational Institutes Are Eligible To Participate.

### **Certificate Policy**

- Top Five Teams From Qualifier Round Will Qualify For The Grand Finale At Crescendo 2019 Which Will Be Held During 15th & 16th March.
- Top Three Teams In The Grand Finale Will Be Awarded Certificate Of Excellence.
- E-certificates Of Participation Will Be Given To The Teams Scoring More Than The Critical Marks Which Will Be Decided Later.

## **20. Event Name: CircuSign**

### **Council Name: WIE**

- Teams Of Two Have To Implement The Circuit Using The Components Provided To Them.
- The Schematic Of The Circuit Will Be Projected On The Screen For A Time Of One Minute.
- The Teams Have To Make The Circuit Based On The Schematic Shown.
- The Team Who Manages To Get The Output In Minimum Time Will Be The Winner.

### **Gameplay**

- 5 Teams Will Be Entering The Room. Each Team Consists Of 2 Two Members.
- Schematic Will Be Shown For One Minute.
- Components And The Truth Table Will Be Provided.
- The Judging Criteria Will Be Time Based.

### **Game Rules**

- The Teams Are Not Allowed To Draw The Circuit Diagram While The Schematic Is Projected On The Board.
- The Teams Should Enter The Room Free-handed.

**21. Event Name:** Photography Competition

**Council Name:** NSS CRCE

- Submissions Will Not Be Accepted Once The Deadline Lapses. Last Date Of Submission Is 16th March, '19.
- Photos Have To Be Mailed To [crce.nss@gmail.com](mailto:crce.nss@gmail.com)
- Photos Submitted Must Be At Least 640 Pixels On The Shorter Side, And No More Than 2000 Pixels On The Longer Side. Images Should Be No Larger Than 2MB. Photos Must Be In JPEG Format.
- You May Submit As Many Entries As You Wish.
- You Are Required To Provide A Unique Title & Description For Each Image Submitted.
- Basic Editing, Including Colour Enhancement, The Use Of Filters, And Cropping Of The Photo(S) Is Acceptable, Provided Any Such Editing Does Not Affect The Authenticity And/Or Genuineness Of The Photo(S).
- Photos That Portray Or Otherwise Include Inappropriate And/Or Offensive Content, Including Provocative Nudity, Violence, Human Rights And/Or Environmental Violation, And/Or Any Other Contents Deemed To Be Contrary To The Law, Religious, Cultural & Moral Traditions And Practices Of India, Are Strictly Prohibited And Will Be Immediately Discarded.
- Plagiarism Is Strictly Prohibited. Pictures From Google Or Any Other Source Are Not Allowed, With Or Without Any Editing. Upon Finding Such An Act, The Participant Will Be Immediately Disqualified From The Competition And No Other Pictures Of The Said Participant Will Be Taken For Scoring.

**22. Event Name:** Footpool

**Council Name:** Rotaract Club Of Crce

- Footpool Is A Combination Of Football And Pool
- The Game Has To Be Played Individually Wherein Every Player Will Be Given A Time Limit Of 1.5 Minutes.
- The Game Consists Of 7 Balls Arranged In The Formation Of 3-2-1 And One Would Be The Striker Ball. The First 3 Balls Will Be Of 10 Points Each. The Next 2 Balls Will Be Of 20 Points Each And The Last Ball Will Have 50 Points.
- The Player Will Be Given A Starting Point And He/She Would Aim From There, In Order To Break The Formation. The White Ball Will Be The Striker Ball I.E. The Ball With Which The Player Needs To Aim. Within The Given Time The Player Needs To Put Maximum Balls Inside The Pocket.
- The Player Is Not Allowed To Strike, While The Ball Is In Motion. The Player First Needs To Stop The Ball And Then Aim.
- If The Player Fails To Do So Then There Will Be A Time Deduction Of 5 Seconds.

- While Playing If The Striker Ball Goes In The Pocket, The Player Loses 5 Seconds Of The Time.
- While Playing If Any Ball Goes Out Of The Court I.E. Not In The Pocket, Then The Player Loses 5 Seconds.
- Also The Player Is Not Allowed To Put The Red Ball Into The Pocket While There Are Other Balls On The Court.
- The Red Ball Should Be The Last One To Go Inside The Pocket. If The Player Puts The Red Ball Inside The Pocket While Other Balls Are On The Court, Then The Player Loses 10 Seconds Of The Time And Will Not Be Given Any Points For That Ball.
- If Two People Have Completed The Game At The Same Time, Then The Gap Between The First Two Balls Scored Will Be Considered. The One Who Scores First Will Be Given Priority. In Order To Differentiate Between The Balls, We Will Be Numbering Them, I.E. The Scores Will Be Written Ono The Balls With An Electrical Tape.