# SANSKAAR TECHFEST 2017

Instructions for Selection Round
to be conducted for The Sanskaar Valley
School, Bhopal.

For team Events: Students are free to choose their partners to work with for elimination Round.



# **Kodu Game Trap**

Classes 4, 5 and 6

No. of Participants 2

Team Event / Individual Team Event

Software to be used Kodu Game Lab

Last Date to submit 25<sup>th</sup> September 2017

Game

#### Instructions:

- 1. Participants should make a team of two (team members can be from same or different class) and design a creative multiplayer computer game (fun being its main component).
- 2. All the teams should submit their Game by **25**<sup>th</sup> **September 2017** to their computer teacher.

- Accuracy of Game
- Players Involvement
- · Creativity and innovation
- Landscape design and craftmanship



# **Mac Scratch**

Classes 4, 5 and 6

No. of Participants 2

Team Event / Individual Team Event
Software to be used Scratch 1.4

Last Date to submit 25<sup>th</sup> September 2017

Game

#### **Instructions:**

Participant should design a computer game using Scratch 1.4 (Offline Version)
that helps in learning a topic in one of the following subjects: Maths, Science.
Social Science. Language (Reading Skills), Computer Science, or addresses
any social problem like controlling pollution, save environment, save water.
cleanliness etc.

2. The game should not exceed one minute. All the participants have to submit their work to their computer teacher by **25**<sup>th</sup> **September, 2017**.

- Effectiveness of Game Usage in real-life Creativity and innovation
- Scope of modification/extension/add-ons



# **Digital Story Time**

Classes 5 to 7

No. of Participants 2

Team Event / Individual Team Event

Software to be used Sway

Last Date to submit 25<sup>th</sup> September 2017

Game

#### **Instructions:**

 Participants must make a storyline on anyone of the topics given below using interactive content on online software Sway and share with their computer teacher by 25th September 2017. They can add videos to talk about their ideas, or an interactive chart to let others dive into the details.

#### **Topics:**

- a) A world of my dream
- b) The TV show that I am going to start
- 2. The Sway must contain the Names of the Participants, School Name and Event

Name.

- Content Originality
- Creativity and Innovation
- Number of multimedia components used
- Overall Presentation



# Digi Wiz-IT Quiz

(Group A and Group B)

Class Group A (Classes 5 to 7)

Group B (Classes 8 to 12)

Last Date to submit name: 23<sup>rd</sup> September 2017

Selection Round: 25<sup>th</sup>September, 2017

<u>Time</u>: 9:40-9:50 am

**Venue:** Anant Computer lab 1,2,3

#### **Instructions:**

 Selection Round: In this round selection of the participants will be through online real time quizzing software.

- 2. Interested students need to give their name to their computer teachers before 23<sup>rd</sup> September, 2017.
- 3. Selection Round will be conducted on 25<sup>th</sup> September, 2017 between 9:40 to 9:50 am. Participants need to finish their breakfast and come to Anant labs for Selection Round for the same.
- 4. Following is the list of topics which participants may refer; however, it is not exhaustive, other necessary references may also undertake.

Computer Fundamentals (History. Types. Generations. basic architecture), Computer and Mobile Operating Systems, Features and identification of digital gadgets, Computer Hardware- software and memory. Latest in IT, Famous Digital World personalities, Computer Games, Computer Science terminology and acronyms. Common Icons. Networking. Cyber ethics acts and laws. mobile based software applications, Plagiarism- laws, consequences. paraphrasing, hacking, phishing, copyrights, patent etc. All about popular IT Companies (like CEOs, Headquarters, Products, Logos, new projects etc.

#### **Judgement Criteria**

 The decision of the quiz master shall be final and binding.



### Weave The Web

Classes 8,9 and 10

No. of Participants 2

Team Event / Individual Team Event

Software to be used Notepad, note pad++, brackets, html, css

Last Date to submit 25<sup>th</sup> September 2017

#### Instructions:

- 1. The participants will have to design an attractive and user friendly website, that should be appealing and informative (minimum 3 pages) on any one of the topics:
  - a) 10 years of Sanskaar Valley School.
  - b) My favorite online Shopping site.
- 2. They may use HTML and CSS only.

- Design and navigation
- Originality
- Creativity and Innovation
- Overall Presentation Coding



# Innovation Zone

### (Group A & Group B)

Class Group A (Classes 5 to 7)

Group B (Classes 8 to 12)

No. of Participants Maximum 5

Team Event / Individual Team Event

Last Date of submission: 3<sup>rd</sup> October,2017

#### Instructions:

- 1) Student/s in each group need to bring an innovative project of their own choice to be showcased in innovation zone.
- 2) Student/s can submit any innovation related to technology be it a software (an app/website/game/technology), hardware (microcontroller/microprocessor/robot etc) or a combination of both.
- Interested students need to submit their innovation by 3rd October,2017 to their computer teachers.

- Benefit of the project to the society
- Technical specification
- Creativity and innovation
- Scope of modification/extension/add-ons
- Overall presentation



# Movie Mania

Class Group A (Classes 5 to 7)

Group B (Classes 8 to 12)

No. of Participants Maximum 3

Team Event / Individual Team Event

Software to be Used Group A: Windows Movie Maker

Group B: Cyberlink Power Director

Last Date of submission: 25<sup>th</sup> September, 2017

#### Instructions:

1. The teams will be required to make a movie of maximum 5 minutes on the theme *Women Empowerment* or *Green Bhopal* capturing the pictures by their own( copywrite free picture or your original picture).

2. The Teams will be required to submit the movie in .mp4/.avi format with resoultion720p/1080p by **25th September**, **2017** to their computer teacher.

- Content
- Quality of images
- Creativity
- Communication through the language of photography and visual art
- Visual and aesthetic



# **Cin and Cout**

Class Classes 8 to 12

Last Date to submit 25<sup>th</sup> September, 2017

name:

No. of Participants 2

Team Event / Individual Team

#### Instructions:

Students will be given two tasks for this event.

#### Task 1: Paper Pen Round.

Students will be given a question paper which will have the following assignments:

- A. To find the output of the given code snippets (written in Algorithm/Pseudocodes)
- B. To rewrite the given algorithm for a specified problem such that the modified algorithm is more effective and is of less complexity
- C. Find and debug the error in the given pseudocodes or flowcharts.

#### Task 2: Code Round (For only the students selected in Task 1)

- A. Students will be required to make 2 programs either in C++ or Java.
- B. Students need to test and debug their programs before submission.
- C. The programs should run for sample input/output (given in the assignment sheet) and also for the unknown outputs.

- A. Both the tasks will have a mark component against each assignment. Students submission for both the tasks will be evaluated and marks will be allotted.
- B. The merit list will be prepared on the basis of cumulative score of task 1 and task2.
- C. Top scorers will be declared as winners.



# **Mission Gamify**

Classes 6 to 12

Software to be Used: Counter Strike Global Offensive

No. of Participants Maximum 5

Team/Individual: Team

Last Date to submit 23<sup>rd</sup> September, 2017

name:

#### Instructions:

1) Auto Snipers and Scoped Rifles will not be allowed during the tournament. (G3SG1, SCAR-20, AUG,SG 553)

- 2) All systems will be VAC protected and all match demos will be recorded, any attempt to use unfair means like aim bots, wall hacks, scripts, etc. will result in immediate disqualification.
- 3) All matches will have direct elimination and will not be league based.
- 4) The qualifiers will be played on dust 2. The matches will be best of nine rounds, the first team to win 5 rounds will move on to the group stage.
- 5) Group stage will be played on either mirage or cache. The matches will be best of 13 rounds, the first team to win 7 rounds will move to the next round.
- 6) The Finals will be played either on nuke or inferno. The matches will be best of 21 rounds, the first team to win 11 rounds will win the tournament.
- 7) The Start money for all matches will be \$1000.
- 8) Any accusations of unfair means or foul play can be raised only during the duration of the match by calling for a team timeout and notifying the organizers.
- 9) The judge's verdict will be final and binding.
- 10) Friendly Fire will be ON.
- 11) The Rules Mentioned above can be altered/modified/removed by the organizers as per their convenience without any prior notice to the Participants.

<sup>\*\*</sup> Interested students can submit their names to their computer teachers by 23<sup>rd</sup> September, 2017.

# App Connect (Make an app to fill the gap)

Classes 6 to 12

No. of Participants Maximum 2

Team / Individual Team

Last Date to submit App 3rd October, 2017

#### Instructions:

Participants are required to do the following:

- Think of an idea and create an Android App that addresses a problem in one of the following areas of social concern: Education Environment Health Poverty Civic Facilities Women Empowerment. You can use any free/open source tool to create the app.
- 2. Each Team will submit their AAP and presentation to their computer teachers by 3<sup>rd</sup> October, 2017

- 1) Creativity
- 2) Problem Solving/Relevance of App
- 3) Ease of use and design
- 4) Technical specification (e.g. Static/Dynamics App; Backend used or not)
- 5) Overall Presentation.



### Clevernote

Classes 8 to 12

No. of Participants 1

Team / Individual Individual

Software to be Used Microsoft OneNote (2013/2016)

Last Date of submission 3<sup>rd</sup> October, 2017.

#### Instructions:

1) The teams need to create a OneNote collaborative notebook.

- 2) They can choose any topic (Lesson) from any subject and create a multi-section notebook with rnulti-pages to have the following information about the topic:
  - Objectives to study the topic
  - Key terms
  - Related Video resources
  - Worksheets and other useful links

For example: If students decide to make a notebook on Evolution of Internet then notebook might have sections to have information about objective, History, important inventions, advantages, disadvantages, quizzes, additional resources and links etc.

The OneNote must contain the Name of the Participant, class, section and school name on the first section of the notebook.
After completing the OneNote notebook, students can create a share

link and share it with your computer teacher on or before 3<sup>rd</sup> October, 2017.

- Notebook design
- Use of Multimedia
- Content Creativity and innovation
- Overall presentation



### **Access Denied**

Class Group A (Grade 8 to 12)

Venue Anant Lab 3

Number of students 1

Team/ Individual Individual

Last Date to submit 25<sup>th</sup> September, 2017.

name:

**Background:** Your PC has been hacked and the hacker has changed the admin account password of your Windows 7 PC. You need some important files from your admin account so you should gain access to admin account.

#### Instructions:

- 1. Students in each group can bring any equipment of their choice ex: pen drives, hard drives etc.
- 2. Students can bring any software on their pen drive.
- 3. The students will be logged into the guest account of Windows 7, from where they will execute the following tasks:
  - a. The first task of the student is to hack into a private SQL server using SQL injection and obtain the password which will be used in the next step.
  - b. The second task of the student is to copy a word file named "Access denied" present on the desktop of admin account to the guest account. The file will be password protected and the password obtained in the first task will be used here. The file will contain a link which will be used in the next task and a password which will be used in the fourth task.
  - c. On clicking the link, it will open a You Tube video, but YouTubewill be blocked. The third task of the student is to unblock YouTube and download the video to the guest account. YouTubeand other sites will be banned by Open DNS and Dans guardian.
  - d. The fourth and final task of the student is to change the admin account password to the password obtained in task 2.
- 4. The students will be given 1 and a half hours to complete the four tasks.
- 5. The tasks can be completed in any order.

6. After every task completion, the participant will call the judge to note the time.

The participants are prohibited from making any physical alterations to the given systems. i.e. the participants are not allowed to open the computer cabinets.

If a participant is unable to perform a task they may ask the organizers to bypass that specific task for them, this would result in a time penalty of:

15 minutes for 1st bypass

25 minutes for 2nd bypass

35 minutes for 3rd bypass

#### **Judgement Criteria**

- o Time will be the criteria for judgement of this event.
- Ranks will be decided based on the time taken to complete the four tasks. The fastest contestant will come first.
- If no competitors are able to complete all the 4 tasks the winner will be decided by taking into account the maximum number of tasks completed by the students and the time taken to do so.

#### NOTE:

\*\* Interested students can submit their name to their computer teachers by 25<sup>th</sup> September, 2017.

