

# Challenge IT News

## Special Points of Interest:

- Support for British Science Week 2016
- Competition for local Schools and Youth Groups.
- Organised by BCS
- Prizes from BCS, IET, OCR, Coventry University, University of Warwick.

January 2016

Email: [challengeIT.cov@bcs.org.uk](mailto:challengeIT.cov@bcs.org.uk)

## Support British Science Week with your entry to Challenge IT

We hope you are making good progress on your entry to Challenge IT 2016.

An important deadline is approaching: By 1st February we need to receive your Team Entry Form — there is some important detail about this in the newsletter

Teams selected as finalists will automatically be taking part in British Science Week by joining us for the Finals Exhibition on 16th March. British Science Week is a ten day national event by the British Science Association, promoting Science, Engineering and Technology related events across the UK.



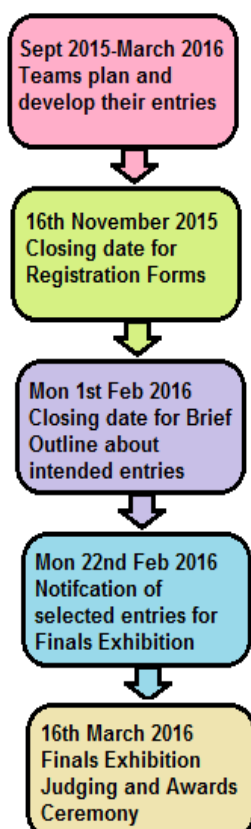
At the Finals Exhibition the selected finalist teams will demonstrate their results to the judges. Teams will have an opportunity to see and judge their competitors' entries before finding out which teams have won the category prizes and who is the overall winning team.

If you have questions or problems then please contact us at [challengeIT.cov@bcs.org.uk](mailto:challengeIT.cov@bcs.org.uk).



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## Submit your Team Entry Forms by 1st Feb!

Don't forget, we need to receive your Team Entry Form by **1st February 2016**! You can download the Form from here: <http://coventry.bcs.org/downloads.php>

We use the statements on the entry forms to select the teams that will be invited to the Finals Exhibition on the 16th March at Coventry University. So what you tell us about your entry is very important! The form is not very long, so it shouldn't take too long to fill it in, but what you write will decide whether or not you become a finalist.

We will notify the adult supporters about our decision on which teams are finalists by **22nd February 2016**.

You may keep working on your entry and your display right up until the Finals Exhibition. You should use this time to resolve outstanding problems and improve functionality before presenting what you have created to the judges.

You can email the form to [ChallengeIT.cov@bcs.org.uk](mailto:ChallengeIT.cov@bcs.org.uk) or Post it to the address on the back page of this newsletter.

# Challenge IT News



*“Be prepared to demonstrate your solution and designs and to explain everything...including who you are and what category of Challenge IT you are entering ”*

## What to Expect From the Judges

The judges will visit the stands to meet the teams in small groups or individually. They will be easily recognised as judges and will probably make a few notes on a clipboard.

They will want to look at your display, talk to you and understand the work you have done. There may be other visitors walking around and you can take the opportunity for practising your presentation on them – some may even be VIPs!

Give the judges time to look at your stand and check out anything you are presenting. However, they may not have time to read everything if you have a lot of text in your posters—better to include lots of diagrams and designs!

Be prepared to demonstrate your solution and designs and to explain everything. You have probably worked on your project over a period of several weeks and are very familiar with it but don't forget to start right at the beginning for visitors – including who you are and what category of Challenge IT you are entering.

The judges will be interested in the whole of your project as well as the end result so make sure you can show them how you designed and developed the project and worked as a team.

The judges will ask questions, such as:

- What is this?
- Who will use this?
- Who have you tried this out on?
- Is it easy to use?
- Can I try it?
- How did you get the idea?
- How did you share out the work?
- Have you learnt anything new doing this?
- What problems did you find?
- What's the best bit?
- Is there anything you'd like to carry on with to make it even better?

Don't worry if a judge doesn't ask questions – perhaps your display made everything easy to understand.

Not every judge will visit your display because each is assigned to judge specific entry categories.

## Guidance: Mobile or Web App Design Entries



When explaining the design of a mobile phone app, it is useful to show example screens. They don't need to be a full colour representation, a simple sketch with indications of colour can help people to understand the design, see important features and show how it would work.

Sketching example screen layouts and how they interlink is a good way to help your team make decisions on how the application could look at different stages.

A range of templates are available to assist with app design - several popular graphic editors come with useful templates in their libraries.

Some useful resources are available to download at the links below, but more are available online:

<http://www.sketchappsources.com/category/mobile.html>  
<https://ninjamock.com/>

Other useful things to consider are:

- how you can test your design to get useful feedback?
- explore the potential market for your app, how can you establish the demand?
- give examples of potential users or scenarios where the app would be useful.

## Guidance: Mobile or Web App Development Entries

If your team is developing and implementing an app then your entry form should tell us briefly what the app is about, your design decisions and also the wide range of activities your team has been concerned with during the project: for example how the idea came about, how the user requirements were identified, programming code creation and what kind of testing was conducted. It is worth submitting your entry form even if you have not fully completed the app as you still have time to work on it before March and your entry

will be judged on a wide range of evidence and skills, including how your team is able to communicate technically and non-technically.

Once you know you are through to the final you need to put together your display and evidence of how your team members have been working together to try to solve problems that arose in the course of the development.



## Guidance: Digital Animation

Teams may base their entry on whatever animation tools, resources and platforms they have available, perhaps Scratch or Alice will prove to be the most popular tool, but you are not restricted to using these platforms.

Your entry form should tell us briefly about the animation you have developed, who it is aimed at and what motivated the team to develop it. It is

really important to ensure your ideas are original rather than copied from other people and that the team members are the designers and developers that created it.

If you can identify a meaningful reason for developing the animation sequence then you may have an audience or end-users that you could ask to provide feedback and to capture further ideas for improvement.

*“we want you to have fun and to enjoy being part of Challenge IT.”*

## Guidance: Control or Robotic Application

There are many different types of kit available on which you can base your entry, including Lego Mindstorms, Arduino, Raspberry Pi, Picoboard. Alternatively you may have developed a home-made robot or have access to one of a range of commercially available robots. The choice is yours. Your entry form should describe the work you have done and the resources you have used,

what your team managed to develop and implement and how you worked together to achieve your results. Even if your application is not fully working you have time to work on it before the finals event. You will have learned very valuable lessons that you can tell visitors and judges about.

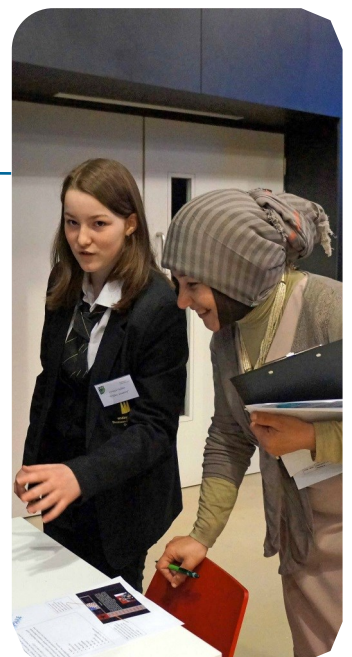
## Guidance: Post-16 Entries

The post-16 entries will be judged separately from the other entries, but you may choose any of the 4 categories outlined above. Your entry form should briefly make clear into which category your project fits, what you have created and how your team achieved it.

The judges will expect post-16 teams to demonstrate good technical and communication skills. Don't be shy in demonstrating how you've

gone that extra mile in the originality of your idea, the sophistication of your design, the technical competence of your software or the rigour of your testing.

However we want you to have fun and to enjoy being part of Challenge IT, both during your development work and at the final, if you succeed in getting through.





## Challenge IT News



### Who are the sponsors and supporters?

Sponsors and supporters are local and national companies, organisations and universities who donate prizes and support the competition in other ways.

During the next few months the competition organisers will be busy deciding the arrangements for the 2016 finals event and establishing a range of prizes to ensure that the best teams and their schools are well rewarded for their efforts.

The logos of some of the sponsors are included below.



**COMPUTING AT SCHOOL**  
EDUCATE · ENGAGE · ENCOURAGE

**OCR**  
Oxford Cambridge and RSA

**IET** The Institution of  
Engineering and Technology

**Coventry**  
University

THE UNIVERSITY OF  
**WARWICK**

### BCS Coventry Branch Challenge IT Committee

The competition is planned and organized by a team of volunteers who are computer science professionals from the BCS Coventry Branch. Members of the Committee are also actively involved in the Computing at Schools Teachers' Hub for the Coventry and Warwickshire area.

The Committee is very much looking forward to receiving the team entry forms, seeing the entries and welcoming the finalist teams to Coventry University in March 2016. We know you have a lot of work to do yet, but hope you find the experience rewarding and enjoyable.



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Competition Website: <http://coventry.bcs.org/competition>