

# Challenge IT News

January 2014

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

## Special Points of Interest:

- Support 2014 National Science and Engineering Week
- Competition for local Schools and Youth Groups.
- Sponsored by BCS.

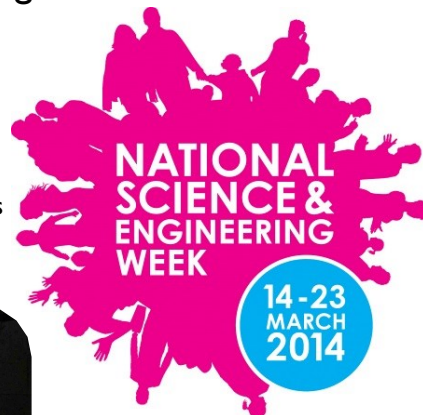


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## Take Part in National Science & Engineering Week!

By participating in the finals exhibition, you will automatically be taking part in National Science and Engineering Week. This is a ten day national event by the British Science Association, promoting Science, Engineering and Technology related events across the UK.



## Your Challenge IT 2014 Team Entry Forms!

Don't forget, we need to receive your Team Entry Form by the **31st of January!** You can download the Form from here: <http://coventry.bcs.org/downloads.php>

We use the statements on this form to select the teams that will be invited to the Finals Exhibition on the 20th 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, and you can keep working on your entry right up until the Finals Exhibition.

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.

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*“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 read through anything you are presenting. However, they may not have time to read everything if you have a lot of text in your posters.

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.

## 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 is a good way to help your team make decisions on how the application could look at different stages.

There are a range of templates to assist with app design - a selection is given next:

1) iPhone app design templates

<http://speckyboy.com/2013/09/20/free-ios-7-gui-kits-templates/>

2) Android wireframe templates

[http://gliderguns.files.wordpress.com/2010/01/android\\_wireframe\\_templates3.pdf](http://gliderguns.files.wordpress.com/2010/01/android_wireframe_templates3.pdf)

3) A collection of articles and resources for designing Android and iPhone apps

<http://www.smashingmagazine.com/guidelines-for-mobile-web-development/>

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

## 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 solve any 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 use for 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 a 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.

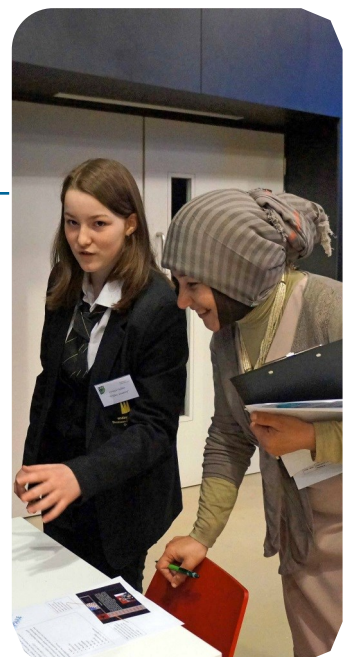
## Guidance: A Note For Post-16 Categories

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 which category your project falls into, 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 2014 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.



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### BCS Coventry Branch Challenge IT Committee

The competition is planned and organised 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 your entry form and deciding which teams will join us and all the special guests for the finals at Coventry University in March 2014.

We know you have a lot of work to do yet, but hope you find the experience rewarding and enjoyable.

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