

## Assessment Task 2: Client's Briefing #2 Transcript

Hello, it's me from *QUT Entertainment Systems* again. I wanted to thank you for submitting your draft user interface for our proposed "live entertainment events" application. I've forwarded it to our technical team for assessment and they'll produce their verdict as soon as possible.

In the meantime we need to get cracking on the application's back-end functionality because we're up against a hard deadline, the end of Week 12 (Sunday, June 5th, 11:59pm). Today I'm going to tell you about two of the application's functional requirements, one quite easy and one which is central to the whole application.

As usual it's clearest if I show you what's required, so I've had the back-room boffins extend their previous prototype.

*[Demonstrates the ability to display the latest event from each of three different live entertainment venues]*

So, as you've seen, by selecting an entertainment venue the user can show the name and date of the next event coming up at each one. Most importantly, this information is downloaded from the Internet whenever the user chooses a venue, so it is always up to date whenever we run the program. Also, to ensure that our program is robust against web server failures, each of the three venues must come from a different Internet domain.

Thus, your first major requirement is to implement this ability to download and show the name and date of the next entertainment event at each of three different venues.

Specifically:

- Each of the three entertainment venues' web pages must reside on a different host. The "hostname" is the part of the web address, or Uniform Resource Locator, immediately after "http" or "https". For instance, "www.brc.com.au" is the hostname for the *Brisbane Racing Club's* event calendar and "www.thezoo.com.au" is the hostname for *The Zoo* live music club in Fortitude Valley. By using three different sources for your program it will be resilient to web server failures; even if one venue is offline the user can still access the other two.
- Each of the three venues must update their list of upcoming events regularly, ideally daily, and certainly no less often than weekly.
- When the user wants to see the next event coming up at a certain venue, details of that event must be shown in the Graphical User Interface. For each such event both the name of the event and its date (or dates) must be shown in the GUI.
- Of course, the data shown in the GUI must be correct. The name and date must both belong to the same event, and the event must be the next one coming up at the venue. Sometimes web pages will include "featured" events at the top, or long running "exhibitions". These may not change for long periods of time and we're not interested in those. If the web site you're using has such events listed before the next upcoming event you should skip over them.
- Although it's not needed just yet, the web site must also have a photo or image of the upcoming event. I'll explain what that's for in my next briefing.

- Finally, there must be no errors in the way the text is shown in the GUI. For instance, no HTML tags or Unicode character mark-ups should be visible to the user. If these appear in the downloaded text you will need to delete or replace them before displaying it.

As I've described it so far, the GUI provides only basic information to the user, and for many users this may be enough. However, some users will want more detail about the event before committing to attending it and that takes me to the second requirement, giving the user the ability to see all available details about the event, if desired. Our company's boffins have solved this in a very easy way, simply by allowing the user to see the original entertainment venue's web page in their local web browser.

*[Demonstrates the application's ability to display the original web pages as a way of both getting more information and of validating the correctness of the data shown in the GUI]*

Thus, via this feature, the user can easily see full details of the upcoming event and we can also confirm that the data displayed in the GUI is correct. The web page opens up in the default web browser on the host computer.

The boffins tell me that this is very easy to do because they've already imported the necessary function into the Python template we've given you and have named it "urldisplay". Indeed, they suggested that you should implement this feature first because it allows you to quickly get to the source web pages to check their current contents while you're developing your code to extract the next event.

Of course, the HTML source code of the original web site is where you get the data to display in your GUI. For instance, here's where we extracted the event name and date for one of our venues.

*[Shows where the event details are located in the HTML source code for one of the entertainment venues]*

Thus, the name, date and the URL of the photo that we'll need later are all available in the source code for this particular site. I'm aware that you've been attending our company's training courses, so I encourage you to review the materials from Weeks 6, 7 and especially 8 to help you with this task of extracting elements from web documents.

The final requirement is that your application must be robust to both changes in the source web pages and user errors. Not only do you need to allow for updates to the lists of upcoming events, but you also need to allow for the possibility that the web servers deliver something unexpected like a temporary "out-of-service" message or even the possibility that the server is entirely offline.

No matter what happens, your program must respond appropriately and must never produce red error messages in the shell window. Remember that the shell window is part of the program development environment, not a part of your application. All interaction with the user must be via the GUI, not through messages printed to the shell.

Here are some examples of how our boffins' prototype responds to errors. "User error" is the first concern, so you should either make it impossible for the user to do the wrong thing, or respond appropriately if they do so.

*[Demonstrates how the application prevents user errors]*

Here we've made it impossible for the user to activate the widgets in the wrong order by disabling the push buttons until a venue has been selected. However, another valid approach would be to display an error message in the GUI if the user tries to see event details without first selecting a venue.

Another source of errors is the web servers. We all know that Internet connections can be unreliable, but your application still needs to behave sensibly in this situation. Here's how our boffins' demo behaves when I disconnect it from the Internet.

*[Demonstrates how the application responds to network failures]*

Anyway, that's all I have for now. Of course, your first challenge is to choose suitable live entertainment venues. To get you started I've listed several possibilities in the appendix to this video's transcript.

Finally, I've just remembered that I haven't told you what the other two widgets in the GUI are meant to do! Unfortunately, I'm running late for my next meeting, so I'll have to explain that in my *next* briefing.

### **Appendix: Some potentially suitable web sites**

Here are some web sites that *may* be suitable for this task, but you are encouraged to find your own. The following sites all allow their contents to be downloaded by Python scripts but we have *not* confirmed that the downloaded HTML code contains all the necessary data (event name, date and photo) in an easily accessible form, nor have we confirmed that they are all updated regularly enough.

- <https://www.brisbaneshowgrounds.com.au/home/what-s-on>  
Brisbane Show Grounds
- <https://www.qso.com.au/events>  
Qld Symphony Orchestra; Multiple dates for some events
- <https://thecomicslounge.com.au/>  
The Comics Lounge stand-up comedy; Tricky looking site, with a "carousel" of repeated events, but simple source code
- <https://thetriffid.com.au/upcoming-gigs/>  
Upcoming Gigs at the Triffid
- <https://suncorpstadium.com.au/what-s-on.aspx>  
Suncorp Stadium; NRL matches and other events
- <https://www.thezoo.com.au/>  
The Zoo live music
- <http://ricsbar.com.au/>  
Ric's Cafe Bar Gig Guide
- <https://www.oldmuseum.org/>  
The Old Museum orchestral events
- <https://www.brc.com.au/calendar>

Brisbane Racing Club; Messy source code, may be hard to find photos

- <https://www.goldcoast.qld.gov.au/Things-to-do/Gold-Coast-Events-Calendar>  
Gold Coast events
- <https://www.songkick.com/metro-areas/26778-australia-brisbane>  
Music concerts in Brisbane; Upcoming gigs are well down the page and grouped by date
- <https://www.eventbrite.com.au/d/australia--brisbane-city/events/>  
Events in Brisbane's Central Business District
- <https://thegabba.com.au/what-s-on.aspx>  
AFL and Cricket; However, many dates are "TBC"
- <https://thetivoli.com.au/events>  
Tivoli Theatre live events; Sometimes dates are "Sold out"
- <https://www.unitedcinemas.com.au/eldorado/coming-soon>  
United Eldorado cinema (plus many others); Movies are not "live" events but at least they get you out of the house!
- <https://www.eventfinda.com.au/concerts-gig-guide/events/queensland>  
Upcoming music gigs in Queensland; The EventFinda site can be filtered in many other ways (e.g., <https://www.eventfinda.com.au/whatson/events/australia>)
- <https://www.qpac.com.au/search/?term=&genre=Comedy&listingtype=event&sort=date>  
Queensland Performing Arts Complex comedy events; This is a very complex web site with many categories - check carefully that the category you choose updates often enough
- <https://cbussuperstadium.com.au/what-s-on.aspx>  
CBUS Super Stadium; NRL and more; However, it may not update often enough
- <https://www.star.com.au/goldcoast/whats-on/entertainment/live-concerts>  
The Star Gold Coast live concerts; Most data is embedded in text attributes and dates may be hard to separate
- <https://cinebar.com.au/movies/coming-soon/>  
Cinebar Movie Theatre Rosalie Village upcoming films
- <https://www.bbc.co.uk/sounds/schedules>  
BBC Radio; This site links to lists of upcoming radio programmes for numerous BBC stations (via the "View schedule" buttons) each of which may be suitable; TV and radio don't really fit the theme of "live entertainment", but we've included this one for people forced to isolate at home!

The following web sites block access to Python scripts but can be downloaded by going "incognito". However, since this goes against the web site owner's wishes, we prefer that you avoid using such sites if possible. Again we have *not* confirmed the suitability of their data for this task, so you need to check that for yourself.

- <https://eatstreetnorthshore.com.au/whats-on>  
Eat Street Northshore live music (Friday to Sunday)

- <https://www.primesport.com/s/sports-schedule>  
Upcoming US Sporting events
- <https://hota.com.au/whats-on/live?category=theatre>  
Gold Coast Home of the Arts theatre presentations; Site has several categories; Need to pick one that updates regularly, and avoid long-running “series” to get to regularly-changing “events”