eMuseum

Developed by the ShortCircuits

1.Description and Features (Please give us a general description of each project as well as a brief description of the features available and datasets used.)

With our android application, *Museums*, we aim at improving the overall user interactivity, not only increasing footfall but also encouraging the crowd to gather in depth knowledge about the artifacts. The app has these following features-

The Game, "Around The Museum"-
Through our treasure hunt interactive game, we have used technology to create an environment within the museum to provide the user with an experience where he'll be compelled to connect with the artefacts and gather information about them.
>Clue based artefact search
>Clues present the information that usually seems monotonous, in an interesting manner
>QR code scanning for answering
>Various levels in the game
>Clues placed all through the museum to make the viewer walk around and also read about all the items.
Dataset used- CSMVS_CuratorsChoice, BDL_Datasheet

The Museumpedia-
It is a compendium providing summaries of information on each of the art pieces showcased in the museum. All the artefacts have been carefully listed in an alphabetical manner and the important accumulated knowledge about them can be viewed on the click of a button.
>Any material can be easily looked up using the search bar
>Search can be also be done by QR code scanning
>Contains images of artifact along with description,etc.
>Functions as a handy encyclopedia
Dataset used- CSMVS_CuratorsChoice, BDL_Datasheet

The Floor Maps-
>A basic navigation tool to make the user aware about the various areas of the museum
>The user can click on specific regions of the floor map and accordingly basic data/image describing the room, pops up.

Events-
Events are one of the central ways to attract crowds. We offer a view of general events (trending, new, etc.) and museum specific events.

Curator's Pick-
A handpicked selection of the top exhibits straight from the museum curators to the audience to keep them up to date with the latest on the curator's list.
>Contains an assorted list of the explicit artefacts in the museum
>Dynamic and will be updated monthly

2.Motivation - (Here we would like to know about your motivation and thoughts as to why you developed this project.)

"Culture and Technology exist in a dynamic reciprocal relationship "- Brenda Laurel. The interesting concept behind the hackathon along with our ardent desire to come up with a powerful idea that can be channeled to make culture and technology work and propagate in unison, has been our constant motivation.

The biggest problem with museums or any cultural institution is their connect with a large audience. The curators we spoke to, expressed their desire to have an interface/app to increase user interactivity and a better way to connect with a diverse audience. We, therefore came up with the idea of an app consisting of a game to increase user interactivity and enthusiasm, maps for better navigation, a museumpedia - to present the details of the artifacts in a more appealing way and tabs to notify the users about the upcoming events and exhibitions.

With these features, we intend to solve some of the major problems of user interactivity and connectivity (with the audience). We hope that our app encourages the crowd to gather in depth knowledge about the artifacts and that they have a memorable experience every time they visit the museums.

3.Technical Details- (Please describe the supported platforms or technologies (mobile, desktop, app, plugin, web, native, etc.), used language, any dependencies (hard- or software) and the license for your code.)

Our app is built for mobiles using Android OS. All functionality of the app can be achieved using phones with Android APK level as low as Android APK 16. This ensures that maximum number of people can use our app.

Languages that we have used are:
>Java - for app logic development
>XML - for app design
>Server - Web server is hosted on the free hosting site: "000webhost", the domain we are using is "dhairyashah.000webhostapp.com/banana.php".
This is used to interact with SQL database, again provided by 000webhost.
We use this domain to also download images required for our app.
Free user license provided by "000webhost" allows us to use their service to serve our data in any way we desire, as long as it does not cause heavy traffic which can overload their servers.

The app has a few dependencies:
'com.squareup.picasso:picasso:2.5.2'
'com.github.moondroid.coverflow:library:1.0'
'com.flaviofaria:kenburnsview:1.0.7'
'com.github.florent37:diagonallayout:1.0.7'
'com.android.support:cardview-v7:26.1.0'
'com.github.arimorty:floatingsearchview:2.1.1'
'com.android.support:palette-v7:26.3.1'

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'com.google.code.gson:gson:2.8.2'
'com.android.support:design:26.1.1'
'com.github.devlight:infinitecycleviewpager:1.0.2'
'com.github.stankoutils:app:1.3.10'
'com.github.bumptech.glide:glide:3.7.0'
'info.androidhive:barcode-reader:1.1.2'
'com.google.android.gms:play-services-vision:11.0.2'
'com.android.volley:volley:1.0.0'
```