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Assignment1

Question1: Contrast an Android Project created with and without an Activity.

Answer:

Activity is part of the application and could be used to dictate the UI and handle the user interaction to the smart phone screen.

With Activity, we could implement different actions with smart phone like dial phone number, search map information , send messages and so on. One activity can also interact with other activities to achieve certain goals. They run in the back stack and they have lifecycle.

Without activity, we can not conveniently interact with smart phone. We may have to bridge the users' operations and the smart phone. However, without the help of activity, it might be quite hard to make machine understand the meaning of users' operations.

Question2: What assumptions can you make about current mobile computing replacing desktop computing:

Answer:

Assumptions on current mobile computing replacing desktop computing:

Even though the market share of mobile gets larger than personal computers, I can not agree that mobile would replace desktop devices. Just like the video says, nowadays mobile makes people's life much more convenient and mobile gets part of our life. Without mobile, we can not live a smart life. But in some fields, desktop devices can never be replaced by mobile, such as the storage ability, secure problems, computing speed and develop new applications.

Comment on current implementations:

Some of the current implementations are really awesome such as google glass, iPhone 5, iPad 3. They are portable which means we could do not need to take heavy electronic devices with us to travel. We could use them anytime even anywhere. It would save our time and improve the efficiency. But the question is that we can not store a lot of information inside and we could not develop new techniques with them. But surely ,like Tv and Autoapps, they can meet the basic entertainment needs. As for our software engineers, I think android 6, gaming consoles would be very attractive. Because we could use them as tools to build our own apps and create our own styled development. However, they are quite limited to those with technique backgrounds.

Assumptions on mobile computing will continue to evolve:
As for my opinion, as is shown in the video, the mobile computing will be more intelligent with interacting with the really world. They would meet requirements of we people more intensively. And of course they could be more user friendly. For instance mobile could help people synchronize our personal data with desktop devices. Then, different kinds of mobile devices should tend to be compatible with each other well so that they can act as a integration to serve for the human-beings.

Question3: Describe the lifecycle for an Android App when running on a physical Android Device:

Answer: The lifecycle described as the following steps:
onCreate( ): Called to create the activity.
onStart( ): Called when the activity is becoming visible to the user. It is followed by onResume() if the activity comes to the foreground, or onStop() if it becomes hidden.
onResume( ): Called when the activity will start interacting with the user. Always followed by onPause().
onPause( ): Called as part of the activity lifecycle when an activity is going into the background, but has not (yet) been killed.
onStop( ): Called when the activity are no longer visible to the user. You will next receive either onRestart(), onDestroy(), or nothing, depending on later user activity.

onRestart( ): Called after your activity has been stopped, prior to it being started again. Always followed by onStart().

onDestroy( ): The final call you receive before your activity is destroyed. This can happen either because the activity is finishing (someone called finish() on it, or because the system is temporarily destroying this instance of the activity to save space. You can distinguish between these two scenarios with the isFinishing() method.

The Android OS uses a priority queue to assist in managing activities running on the device. Based on the state a particular Android activity is in, it will be assigned a certain priority within the OS. This priority system helps Android identify activities that are no longer in use, allowing the OS to reclaim memory and resources.