**Мобильные технологии вопросы к экзамену**

1. Describe the types of mobile applications, their structure, weaknesses and advantages.
2. Describe the definition of cross-platform applications and basic concepts.
3. Write about the main criteria for choosing tools for implementing mobile applications.
4. Give the concept of an emulator. Types of emulators for testing mobile applications.
5. Describe the application development tools for Windows Phone.
6. Give a comparative description of development environments for mobile platforms.
7. Give the definition of the widget and its brief description.
8. List the stages of designing mobile applications.
9. Give an overview of the Microsoft Azure cloud platform.
10. Describe how to create a database in mobile applications.
11. Describe how to create a mobile application with database connection.
12. Describe which file is decisive for any mobile application, and what it contains.
13. Describe the structure of the Android project.
14. Describe the technologies for building cross-platform mobile applications Xamarin
15. Describe the steps involved in building cloud web applications.
16. List the capabilities of modern OS for mobile devices
17. Describe programming approaches for mobile platforms.
18. Describe the life cycle of a mobile application.
19. Describe the main stages of application development on Cordova.
20. Describe the novelty of HTML5 for application development.
21. Write about creation Xamarin mobile applications for three platforms: Windows, Android, IOS.
22. Describe development of XAML forms. Give an example of the program code.
23. Demonstrate the location of Text and Button elements on Xamarin form.
24. Describe the creation of Note application.
25. Describe Note creation and deletion in the Note application.
26. Describe ways of editing the visual representation of elements in XAML form.
27. Describe Button click actions. Give an example of the program code.
28. Write about the process of creating new emulators and running them in Microsoft Visual Studio.
29. Describe of the process of creating a new project in Android Studio. Write about main elements of it.
30. Describe the development of a video game in Android Studio. Write about the creation of new Activity in the application.
31. Describe the development of a video game in Android Studio. Write about the connection of a drawable folder to the application.
32. Describe the development of a video game in Android Studio. Give examples of setting the background, images and texts on the main screen.
33. Describe the development of Floating Fish video game. Give example of the **flyingFishView** class.
34. Describe the development of Floating Fish video game. Write about the creation of a background and location of images of the fish, score text and lives of the fish.
35. Describe the development of Floating Fish video game. Give an example of OnDraw method where the values of the range of fish movements have been added.
36. Describe the development of Floating Fish video game. Write about creation of bubble elements on the screen.
37. Describe the development of Floating Fish video game. Give an example how the game’s score is counted.
38. Describe the development of Floating Fish video game. Give an example how a life counter changes when the fish runs into red bubbles.
39. Describe the development of Floating Fish video game. Write about the creation of End of the game activity.
40. Describe the development of Floating Fish video game. Write about how the application runs and the fish’s movements are controlled.
41. Give the definition of the Android Studio and describe the brief history about Android Studio.
42. Describe the structure of the Android project. Define Android app resources.
43. Describe the work of the interface in an XML file. Layout files.
44. Describe the work of the main controls elements. Checkbox elements.
45. Describe how to work with pop-up messages Snackbar in Android apps.
46. Describe the work of the main controls elements. Radio Button.
47. Describe the work of the main controls elements. The Slider SeekBar.
48. Describe how to work with resources.
49. Describe the structure of the Android app menu: parameters.
50. Describe the structure of the Android app menu: context menu.
51. Describe the structure of the Android app menu: pop-up menu.
52. Describe how you work with pop-up messages Snackbar in Android apps.
53. Describe the Activity lifecycle in Android apps.
54. Describe how you can work with animation in Android Studio.
55. Describe the work of visual part of the application.
56. Describe the work of XML markup for the Android app UI.
57. Describe the work with files. Selecting internal or external storage. Request for available space. File deletion.
58. Describe the work with files. Request for available space.
59. Describe the work with files. File deletion.
60. Describe the work of Layouts in Android.