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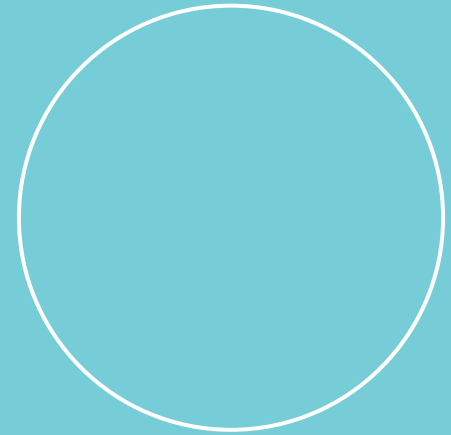
INSTALLATION TESTING

MENTORING PROGRAM FOR MANUAL QA

FEBRUARY 12, 2020



- 1. What is installation testing?**
- 2. Goals of installation testing**
- 3. Installation**
- 4. Update**
- 5. Uninstallation**



What is installation testing?

Installation Testing – non-functional type of testing, that focused at checking the successful installation and configuration, as well as updating or uninstalling the software.



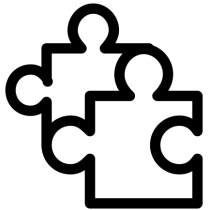
Goals of installation testing



This is very important as installation would be the **first user interaction** with the end users



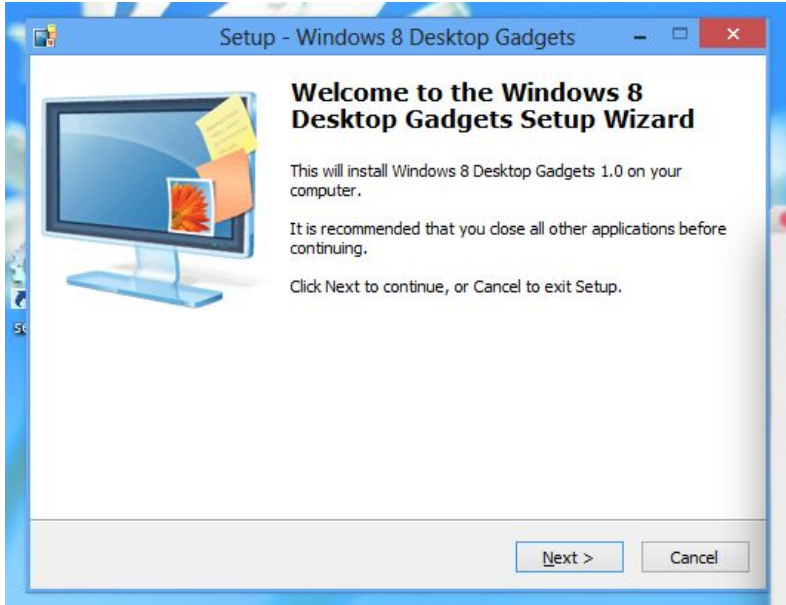
Installation testing focuses on what **customers will need** to do to install and set up the new software successfully



Perform to verify that all necessary **components of the application** are, indeed, installed.

INSTALLATION

Installation. Desktop



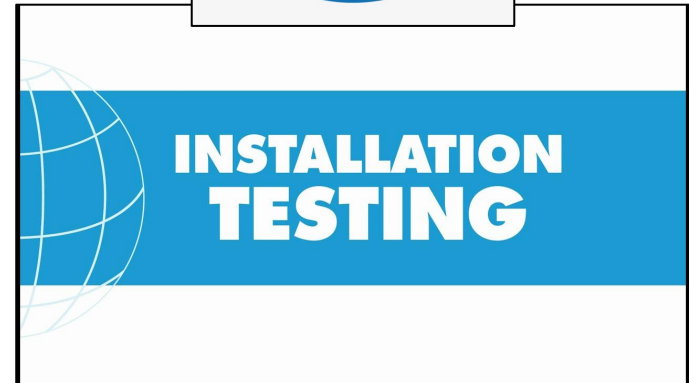
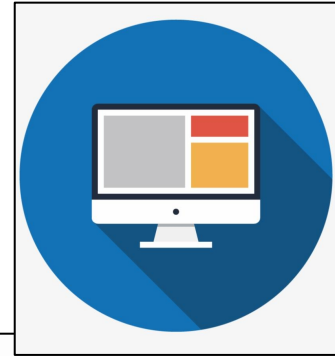
Installer - is a program whose main functions are Installation, Updating and Uninstalling the software.



Installation. Desktop

The installer has a number of features, among which are the following:

- ❑ Deep interaction with the operating system and dependence on it (file system, registry, services and libraries);
- ❑ Compatibility of both native and third-party libraries, components or drivers, with different platforms;
- ❑ Design and style of the installation application;
- ❑ Ease of use: intuitive interface, navigation, messages and tips;
- ❑ Compatibility of user settings and documents in different versions of the application;



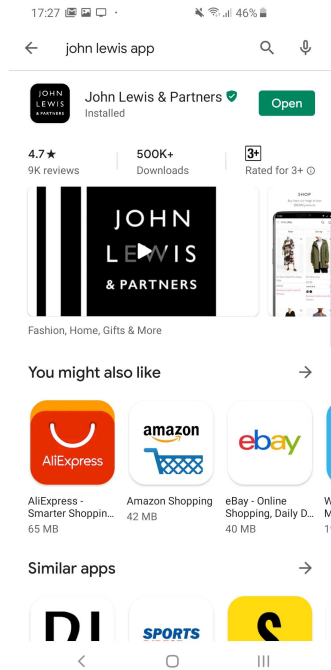
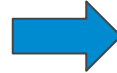
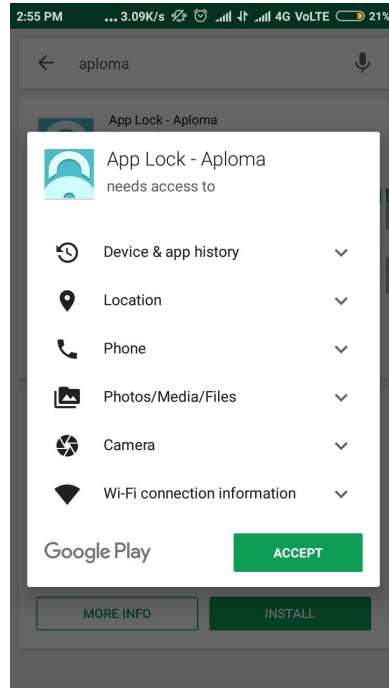
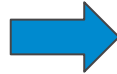
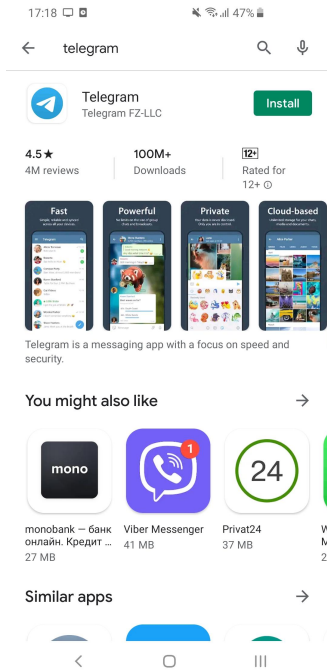
Installation. Desktop

In most cases, the installer is an application in the form of a wizard, which may have specific requirements, recommendations for testing which are discussed below:

- ❑ Forget about the GUI. Try to describe test cases without being tied to interface elements.
- ❑ Do not forget to do such a routine type of testing wizards, how to go back and forth through the pages:
- ❑ Without changing anything, all answers should be saved; changing something on the previous page, the next one should undergo an adequate change or reset of answers.
- ❑ Make sure that the wizard responds adequately to incorrect answers and does not allow you to move on.
- ❑ The Cancel (Close) button should always work and on all pages of the wizard.

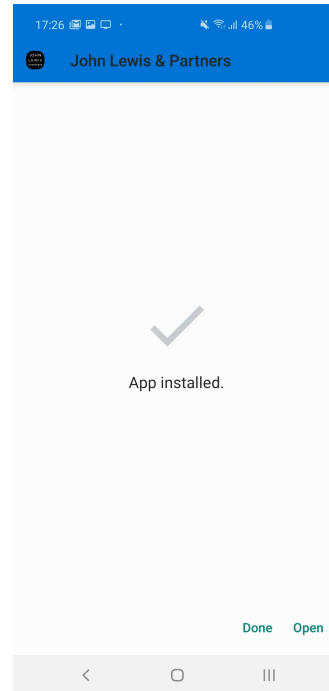
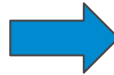
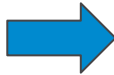
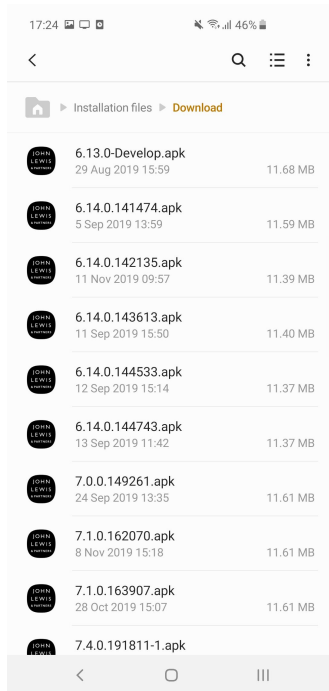


Installation. Mobile_production build

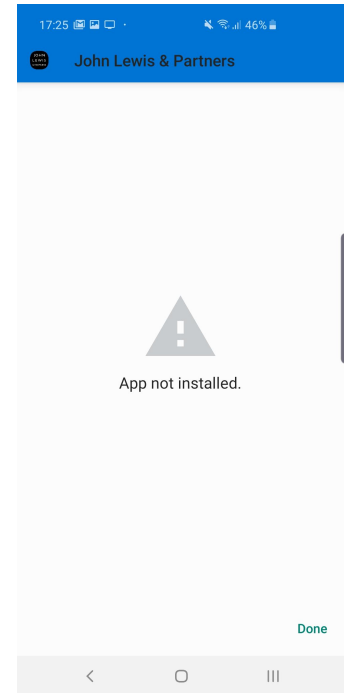


Only for Android 6 and less

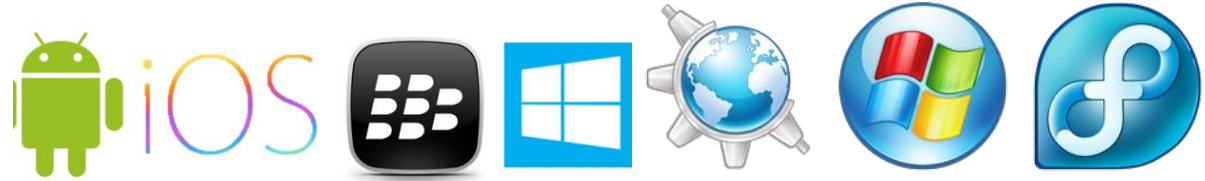
Installation. Mobile_development build



OR



Cross-platform testing



Cross-platform testing of installers, which must be carried out for all three functions - installation, updating and removal:

- ❑ Correctness of the installer's work with various OS versions, Service packs and installed updates.
- ❑ Checking files, drivers and libraries when installing under different OS.
- ❑ Checking access rights to files, folders and system records for different operating systems.
- ❑ Checking permissions set on application files.



Installation

A list of risks that will show the significance of the correct installation:

- ❑ risk of losing user data
- ❑ risk of operating system crashes
- ❑ risk that the application does not work or is not installed at all
- ❑ risk of application malfunctioning



UPDATE

Update/Upgrade

1. The correctness of the file list, as well as the absence of extra files:
 - ❑ Checking the list of files with different installation parameters.
 - ❑ Lack of extra files.
 1. Backward compatibility of generated data
 2. Update when the application is running.
 3. Aborting an update.



Update/Upgrade

Backward compatibility testing includes the following steps:

1. After installing the update, all previously created objects by the application, such as documents, forms, save (if this is a game) should open and work without errors. This behavior is called backward compatibility. User settings should remain the same, of course, if the updates did not affect their change.
2. The documents of the same type created in the new version should open correctly in older versions, of course, if the purpose of the update was not to change the file format and structure. If a new format was introduced, then the new version should have the ability to save the document in the old format.
3. If the updated application is running, the user should receive a warning that the update is not possible when the application is running.

UNINSTALLATION

Update/Upgrade

Removal (Uninstall):

1. Correct application deletion
2. Removal from the system registry of libraries and service records installed during the installation process.
3. Delete physical application files.
4. Delete / restore previous file associations.
5. Safety of files created during the work with the application.
6. Removal when the application is running.
7. Uninstall with restricted access to the application folder.
8. Removal by the user without the appropriate rights.



Questions?

Task:

- Create test cases for Installation, Upgrade, Backward compatibility, Uninstallation testing of any mobile application (at least 2 for each)
- Create test cases for testing of Installation Wizard of any Desktop software (e.g. VLC Player)