

COMPUTING: Coding & App Unit **KNOWLEDGE ORGANISER**

Overview



Apps

Technology has changed the people operate in both our personal and business lives. People use mobile apps for everyday tasks and business operations. Being familiar with this technology and its uses can help simplify many areas of your life.

Applications are software designed to run on a smartphone, computer, tablet or other electronic devices. Apps have a design intended for a specific function. Most apps relate to a business or service, but this is not true in all cases. For example, gaming applications often have no relation to a business as far as concerns the user.

Mobile App development

Mobile apps are programmes that are downloaded and installed on a mobile device. Mobile apps are necessary to download to access their content.



User input

Text boxes – allowing the user to input a string

Check boxes – allowing for the user to indicate a yes or no response

Button – linked to an event that will capture and process the data



GUI

Graphical user interface

A visual way of interacting with a computer using items such as windows & icons

App is a common term for an application, especially for simple applications that can be downloaded inexpensively or even for free.

Mobile App development

A mobile application or app is a computer program or software application designed to run on a mobile device such as a phone, tablet, or watch.

Key Terms:

Decomposition

Breaking down a problem into smaller chunks. This makes it more manageable and easier to understand.

Pattern recognition

Looking carefully in lines of code for patterns, similarities and trends.



Debugging

Looking through your program to find errors and then fixing them.

Abstraction

Filtering out and focusing on what is important. Ignoring what is not important

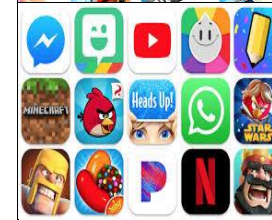
Algorithm Design

A plan and step by step instructions on how to solve the problems

Making Effective App



The graphical user interface is a form of user interface that allows users to interact with electronic devices through graphical icons and audio indicator such as primary notation, instead of text-based UIs, typed command labels or text navigation.



Event driven programming

User action such as:
 Mouse clicks
 Touchscreen
 Key presses
 Voice input



Pair programming

The driver: To control the keyboard and mouse and place the code blocks into the correct places.
The navigator: To help support the driver by watching for any mistakes, reading instructions to the driver and seeking support if needed

The difference between good app design and a poor one is usually the quality of its user experience. Fast loading times, ease of use, and overall customer satisfaction during an interaction should be integral parts of your design. Great app design is clearly laid out, efficient to use, and aesthetically pleasing.

Important Vocabulary

Mobile

Apps

Design

Coding

Programming

Algorithm

Debugging

GUI

Touch screen