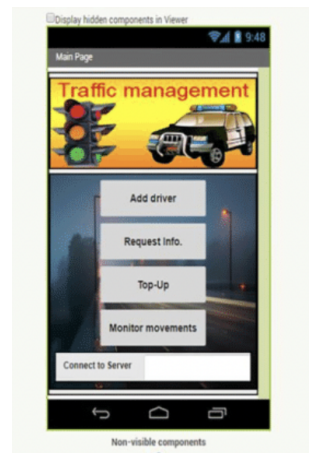




Year 9 Digital Technology

Design & Code Educational Phone App



Student Name:

Class:

The first project this year will be designing and coding an educational app that can help students at MHJC with their learning in Maths, science, English, Global Studies, PE&Health. You will be following a technology design process and use the MIT app inventor to design and code the app. The app could be an educational game or any educational resource. You will use this guide to document/record your technological practice.

Task 1 – Need or Opportunity (Writing my Product Design Brief and Attributes):

A design brief is a document that gives an outline of a product or outcome. It contains a description of the design problem or situation as well as the specifications that the product is designed to meet. Your design brief will be centered around the educational phone app and your product will need to be fit for purpose.

Task 1 is where you write your design brief. Your design brief will contain these separate parts:

- **The Situation** (an outline of what you are making, who you are designing it for and where it will be primarily used)
- **The design specifications** for your educational app (use the specifications given below)

Your design brief (5Ws):

Begin by answering all these five points, this is the situation.

1. **What** am I designing and coding?
2. **Why?** am I making it?
3. **Whom** am I making my product for? (The main stakeholder)
4. **Where** will the product be primarily used?
5. **When? (How long)** do I have to complete the design and code the product?
6. **How will I make it?** Construction steps

Your design specifications:

The design specifications are points that your product should meet when it is completed. Design specifications are important because they guide the development and manufacture of your design. These are the design specifications for your product:

a- Teacher’s given specifications of your phone app:

- Must be educational, useful and appropriate for student use.
- Must use MIT app inventor to design and code.
- Must be user friendly – not complicated to use.

b- Your personalized specifications:

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My Physical and functional attributes -fill in your developed specifications/ attributes:

My Personalized Specifications:
Physical: How does your product look like?
Functional: (What does your product do?.. It’s function...)

Task 2- Research Ideas

Researching and analyzing existing technological outcomes:

Research online and complete the following:

- Find different educational phone apps to give you some ideas (At least 3 different apps). Write a brief about their function
- Add annotation notes to describe what you like and dislike about the designs.
- Write below:

Task 3 – My stakeholder – Client at MHJC:

My stakeholder- client's name:

Class:

Interests:

Challenging subject in school:

Task 4 – Develop your Conceptual Design

- Draw 2 different conceptual design ideas for your app on A4 paper. You need to include notes that detail the main measurements and design features on the sketch. (**Describe and evaluate your drawing against your design brief, specifications and attributes**)
- You need to communicate your ideas with the stakeholder – client (MHJC student). If you were the stakeholder then get someone like a friend, a teacher or a family members to comment on your ideas and develop/change as advised. (show the stake holder comments).
- Scan your final app design and insert below:

Task 5- Experimenting with MIT APP Inventor:

Click on the link below to visit the MIT app inventor and follow the instructions of how to start the program and then practice learning by visiting the beginners tutorials. Attempt all of them and then take a screenshot showing the completion of all apps and insert below:

Task 6- Produce a functional model-Prototype

Start designing and writing the first version of the app as a model-prototype. This will enable you to test the physical and functional attributes of your app with your client- stakeholder in order to make the final judgement about your app and then you can refine it. (you need to include photos of the model and refinement then insert below):

Stakeholder- client ongoing feedback:

Task7- You can now start writing the code of the final version of your app

(In sert a video of your functioning app)

Task8- Brief evaluation.

Write a full evaluation for your outcome-product against the design brief and specification/attributes. Your product has to be fit for the purpose it is intend for in terms of physical and functional attributes. The following questions will assist you to evaluate your product:

- What is the project about?
- Why did you need to do it (purpose)?
- What was your design?
- What have you done?
- What software you have used to code the app?
- What were the challenges in coding your app? What went well and what didn't ?
- Was my design successful against the brief? How?

Fitness for Purpose. Your product has to be fit for the purpose it is intend for so that means

it has to do/have physical and functional attributes so that is “fit for purpose”.

- Does your product meet your design brief and specs? Is it fit for purpose? Yes /No – explain your answer.
- I learnt about...
- I learnt how to...
- My stakeholders said...
- Next time I will..... (how can you improve on your app)?