# Interim Report

## Aims and Objectives

I am currently completing a project to create a digital Checklist for pieces in a Lego Set. This will be where people can search for a Lego Set and then click on the Set they would like pieces for. They will then be presented with all the pieces in this Lego set (like in the back of the instruction book), and can tick the pieces off the list when they are building the set again, or believe that they have the right pieces to build another set.

For example, you have a Lego set that you have taken apart and put all the pieces in a box along with other Lego pieces, and you would like to rebuild the set, you could do this easily using a digital checklist.

I am going to produce a digital Checklist for pieces in a Lego Set, that will be a mobile and/or website application,

Possible Features:

* A search feature that allows users to search by name, Set Number, Year Made, Theme (e.g. marvel, dc, star wars, Lego city, Indian Jones) to locate the required Lego set
* Tick off brick off the checklist, showing how many more of that brick are remaining (able to undo if wrong brick clicked)
* Filter brick colour and/or type when checking bricks off the list
* The checklist shows a picture of the piece (with right colour) as well as a description including piece name and colour
* Scan a brick with a phone camera
  + Tick off list if it is in the set (and not already enough of them)
  + If not in set it will inform the user
  + If in the set but already enough it will inform the user
* If a brick is missing the user can click a link to a website, where they can buy the missing piece/pieces
* Be able to view/download instructions for the current Lego set
* Be able to save current checklist progress so that the user can return to it at a later date
* Be able to favourite sets the user owns and add them to a favourites/my Lego sets list, that the user can also search
* Users can use the system with or without an account, but can only save checklist progress and favourite sets with an account.

Challenges I expect to face during the project are

* Linking the rebrickable to a mobile application and/or a website

## Survey of Literature/Information Sources

I looked up the Rebrickable API I am going to be using to locate data

And read the documentation [2]

I found an API (Brickset API) that I can use retrieve Lego set instructions (as the current Rebrickable API cannot do this), but will only use it for retrieving instructions as it cannot get set pieces which is a vital part of the project, so I will use Rebrickable API for this. [3]

## Requirements

## Outline of Specification and Design

## Planning and Timescales

## References

1. Del
2. "Rebrickable API Documentation | Rebrickable - Build with LEGO", *Rebrickable.com*, 2020. [Online]. Available: https://rebrickable.com/api/v3/docs/?key=15b84a4cfa3259beb72eb08e7ccf55df. [Accessed: 15- Nov- 2021]
3. Huw"API version 3 documentation", *Brickset.com*, 2020. [Online]. Available: https://brickset.com/article/52664/api-version-3-documentation. [Accessed: 15- Nov- 2021]
4. Del