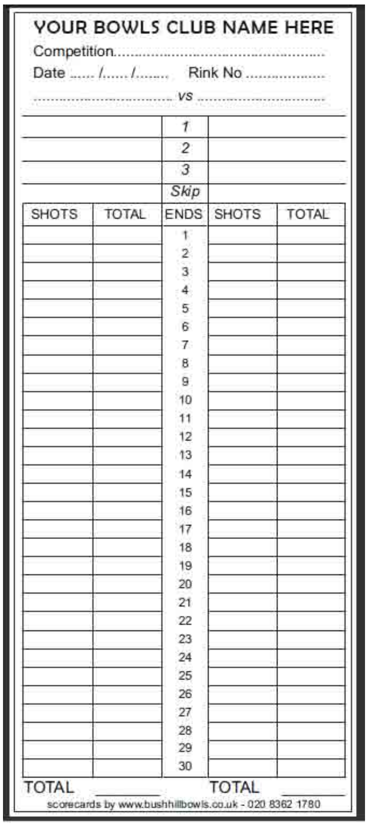
Mobile Application Development – React Native Portfolio Entry

THIS COURSEWORK IS WORTH 15% OF THE TOTAL FOR THE MODULE.

Score Card App

You have been approached by a local bowls club who would like you to digitise their score card into a mobile application that is **both iOS and Android compatible**.



YOUR BOWLS CLUB NAME HERE

Competition...

Date ...... /...... /........ Rink No ....

.... vs ....

		1		
		2		
		3		
		Skip		
SHOTS	TOTAL	ENDS	SHOTS	TOTAL
		1		
		2		
		3		
		4		
		5		
		6		
		7		
		8		
		9		
		10		
		11		
		12		
		13		
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		25		
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		27		
		28		
		29		
		30		

TOTAL ________ TOTAL ________

scorecards by www.bushhillbowls.co.uk - 020 8362 1780

Currently the score card is a physical card, and the sports club is eager to find a more environmentally friendly solution. The score card logs the competition, date, rink number, teams, players and each ends shots and accumulative scores. The committee believes that by making the score card a digital medium will increase the possibilities to logging additional information beyond what a static physical product currently offers. The score card app should be styled for the older generation with an appropriate user interface. Some sample used score cards have been included in the Appendix section of this document.

The score card app must be written in **JavaScript only** using the React and React Native libraries in combination with the **Expo CLI only**. If official React Native components have been depreciated and moved to a separate recommended third-party library, then these can be used, for example:

- React Navigation - https://reactnavigation.org/
- Async Storage - https://react-native-async-storage.github.io/async-storage/

Submissions with unauthorised third-party libraries, generated code, frameworks, or use of other tools, will be considered a non-submission. If you are unsure, please ask a member of the module staff.

Functional requirements

The Committee has identified the following requirements, and indicated their respective priorities:

Requirement	Description of requirement	Priority
#1	• A user can create a new card by entering the following details: competition name, date, rink number, team names and player names. • Conditions: ○ Number of player names can be between 1 – 4 players. ○ Date could be done to automatically with today's date or can be done via a Date Picker.	MUST 3 marks
#2	• A user can add the shots for each end to a team, the running total value should be calculated and presented.	MUST 3 marks

	- Conditions: - Shots for each end can only be applied to one team. e.g., if one team gets shots the other team gets zero	
#3	- The user experience and interface should be designed and styled appropriately for the older generation and not tech savvy individuals.	SHOULD 1.5 marks
#4	- Implement an effective use of the Reducers and the Context hooks, to manage data across the application. - Implement a persistent storage system either locally or externally.	COULD 3 marks
#5	- A user should be able to view previously played cards and view the full results. - A user should be able to edit previously played cards and make changes to the results. - A user should be able to remove a previously played card.	COULD 3 marks
#6	- A user, can optionally take a picture for each end using the camera hardware. The picture should be retrievable in future uses of the application.	COULD 1.5 marks

Marking criteria

Each requirement is worth up to the presented marks that add up to the total of 15% available for this entry in the portfolio. Whether you receive full marks for each completed requirement will be informed by:

- Quality of code
- User experience
- Whether independent research was required (e.g., the work done goes beyond the taught material, which generally is expected of third year students). These areas can be highlighted in code using comments.
- Whether the requirement operates in a bug-free fashion

Viva

We reserve the right to ask you to attend a viva (i.e., oral presentation) where you will be asked questions about your code to demonstrate ownership and understanding of your own submission. Whether you are asked to attend a viva or not will depend on:

- Your engagement during scheduled classes
- Your formative submissions (i.e., the work you do for learning purposes rather than marks)
- The work you submit (if it’s an interesting submission and we want to ask some questions

If you are asked to attend a viva, then your final mark will be subjected to a multiplier factor as follows:

Multiplier	**Viva assessment**
1	Ownership and understanding of the code submitted is clearly established. The student responded to questions about their work with authority.
0.6	The student was able to answer most questions about their work, but there were some gaps in understanding of the code submitted.

0.3	The student was able to answer some questions and demonstrate only a limited understanding of their own submission. However, there was a clear disconnect between the quality of code/application and the students' understanding of the technology and principles encapsulated within.
0	The student was not able to provide any meaningful responses to questions about their work. Extremely limited, or no understanding of the code submitted was apparent.

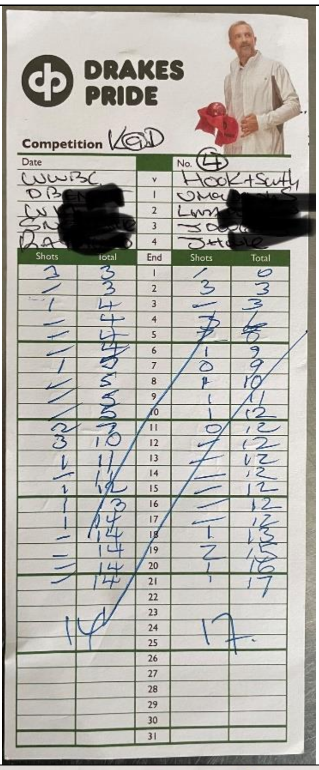
Submission process

Please submit your React Native project folder as a compressed **ZIP file** including all your source code via Canvas. When you create your project ensure that you include your K Number within the project title. You are **NOT** required to include the 'node_modules' folder in the ZIP file for your submission as all dependencies will be available via the package.json file.

SUBMISSIONS OF ANYTHING THAT WAS NOT ORIGINALLY GENERATED USING THIS EXPO CLI WILL BE CONSIDERED A NON-SUBMISSION!

Hand-in dates will be announced during the class and on Canvas – please be sure to be attentive to ensure you do not lose marks unnecessarily!

Appendix - Sample Score Cards



DRAKES PRIDE

Competition KGD

Date		No. 4
WWBC	v	HOOK+South
DB[redacted]	1	JMc[redacted]
LN	2	Lw
SN	3	JD
RA	4	JH

Shots	Total	End	Shots	Total
3	3	1	/	0
/	3	2	3	3
1	4	3	—	3
—	4	4	3	6
—	4	5	2	8
/	4	6	1	9
1	5	7	0	9
/	5	8	1	10
/	5	9	1	11
/	5	10	1	12
2	7	11	0	12
3	10	12	—	12
1	11	13	—	12
—	11	14	—	12
1	12	15	—	12
1	13	16	—	12
1	14	17	—	12
—	14	18	1	13
—	14	19	2	15
—	14	20	1	16
—	14	21	1	17
		22		
		23		
14		24	17.	
		25		
		26		
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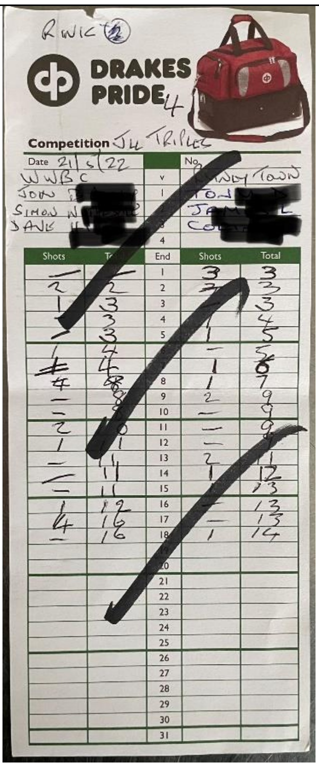
		28		
		29		
		30		
		31		



RWIC 2

DRAKES PRIDE 4

Competition J4 TRIPLES

Date 21/5/22		No.
WWBC	v	INDY TOWN
JOHN D[redacted]	1	TOM [redacted]
SIMON N	2	JAM L
JANE H	3	COL
	4	

Shots	Total	End	Shots	Total
—	—	1	3	3
2	2	2	—	3
1	3	3	—	3
—	3	4	1	4
—	3	5	1	5
1	4	6	—	5
~~4~~	4	7	1	6
4	8	8	1	7
—	8	9	2	9
—	8	10	—	9
2	10	11	—	9
1	11	12	—	9
—	11	13	2	11
—	11	14	1	12
—	11	15	1	13
1	12	16	—	13
4	16	17	—	13
—	16	18	1	14
		19		
		20		
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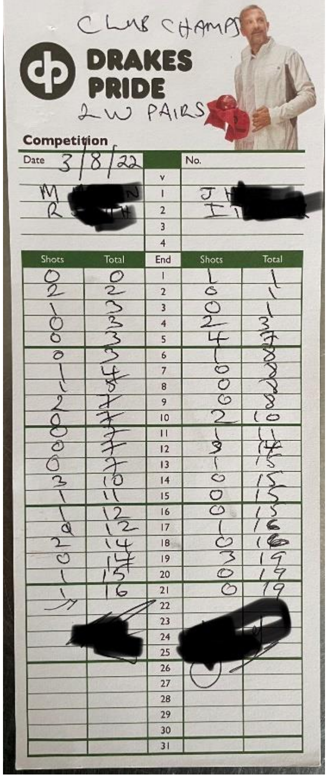
		28		
		29		
		30		
		31		



CLUB CHAMPS

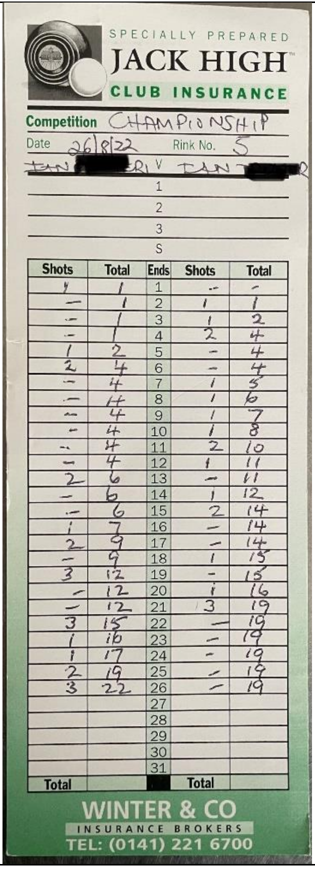
DRAKES PRIDE

2W PAIRS

Competition

Date 3/8/22		No.
	v	
M[redacted]N	1	J H[redacted]
R H	2	I
	3	
	4	

Shots	Total	End	Shots	Total
0	0	1	1	1
2	2	2	0	1
1	3	3	0	1
0	3	4	2	3
0	3	5	4	7
0	3	6	1	8
1	4	7	0	8
1	5	8	0	8
2	7	9	0	8
0	7	10	2	10
0	7	11	1	11
0	7	12	3	14
0	7	13	1	15
3	10	14	0	15
1	11	15	0	15
1	12	16	0	15
0	12	17	1	16
2	14	18	0	16
0	14	19	3	19
1	15	20	0	19
1	16	21	0	19
		22		
		23		
	[redacted]	24	[redacted]	
		25		
		26		
		27		
		28		
		29		
		30		
		31		



SPECIALLY PREPARED

JACK HIGH™

CLUB INSURANCE

Competition CHAMPIONSHIP

Date 26/8/22 Rink No. 5

IAN [redacted]RI V IAN [redacted]R

1

2

3

S

Shots	Total	Ends	Shots	Total
1	1	1	-	-
-	1	2	1	1
-	1	3	1	2
-	1	4	2	4
1	2	5	-	4
2	4	6	-	4
-	4	7	1	5
-	4	8	1	6
-	4	9	1	7
-	4	10	1	8
-	4	11	2	10
-	4	12	1	11
2	6	13	-	11
-	6	14	1	12
-	6	15	2	14
1	7	16	-	14
2	9	17	-	14
-	9	18	1	15
3	12	19	-	15
-	12	20	1	16
-	12	21	3	19
3	15	22	-	19
1	16	23	-	19
1	17	24	-	19
2	19	25	-	19
3	22	26	-	19
		27		
		28		
		29		
		30		
		31		
Total			Total	

WINTER & CO

INSURANCE BROKERS

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