



Financial Business Plan for SWEng Group Three (SG3) Enterprise

Written by the Finance Manager for SWEng Group Three Enterprise.

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Foreword:

This Financial Business Plan has been resubmitted to request a larger estimated loan owing to increases in forecast labour hours following further collaboration with all group members.

Introduction:

This document includes the Financial Plan for our group based on a cash flow forecast for the development phase of our product, and a Gantt chart indicating how many hours of labour are likely to occur each week.

This document also explains our product and provides cost analysis of our costs to aid the financial advisor with financial decisions.

Our Product: Hands Off:

- Hands Off is an app created to teach users about cooking. This app is aimed primarily towards android users between the ages of 18 and 30, and provides:
 - Step-by-step recipes in a slideshow format.
 - Informative videos teaching the user basic cooking techniques.
 - A platform on which to 'favourite', share and create recipes, as well as the ability to interact with other users.
- The Unique Selling Points (USP's) and key features of this app are:
 - When following a recipe in the app, the user will be able to use minimal movement to switch from one step to the next, either through use of tapping the screen or possibly through gesture/motion recognition.
 - The app will have a paid version, where there will be no adverts, exclusive access to regularly changing competitions, and giveaways and discounts on cooking and food related products and experiences.
 - The app is therefore available in both a free and a paid version. The paid version will be advert free, whereas the free version will contain banner adverts and interstitial adverts before the first step in any recipe.

Cash Flow Forecast for the Development Phase of Hands Off: SWEng Group Three Enterprise Innovation(With Compound Interest, see Appendix D for the Forecast Without Interest):

	Spring Term										Easter Holidays										Summer Term									
Week Commencing	1	2	3	4	5	6	7	8	9	10											1	2	3	4	5	6	7	8	9	10
8/12/2018	15/12/2018	22/12/2018	29/12/2018	5/12/2018	12/12/2018	19/12/2018	26/12/2018	5/12/2018	12/12/2018	19/12/2018	26/12/2018	2/1/2019	9/1/2019	16/1/2019	23/1/2019	30/1/2019	6/2/2019	13/2/2019	20/2/2019	27/2/2019	6/3/2019	13/3/2019	20/3/2019	27/3/2019	3/4/2019	10/4/2019	17/4/2019	24/4/2019	1/5/2019	8/5/2019
	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£	£
Income																														
Estimated Contracts In	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.03	64.06	32.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Estimated Loan	0.00	0.00	0.00	0.00	0.00	0.00	30,000.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Income	0.00	0.00	0.00	0.00	0.00	0.00	30,000.00	32.03	64.06	32.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Expenses																														
Estimated Wages Accrued	0.00	131.25	25.00	200.00	375.00	381.25	256.25	256.25	256.25	234.38	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13
Project Manager	0.00	343.75	206.25	31.25	87.50	84.38	90.63	90.63	90.63	84.38	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50
QA & Documents Manager	0.00	287.50	96.88	131.25	328.13	328.13	340.63	340.63	340.63	353.13	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00
Software Manager	0.00	171.88	171.88	181.25	121.88	181.75	106.25	106.25	106.25	106.25	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50
Design Manager	0.00	150.00	381.25	475.00	406.25	390.63	281.25	343.75	308.38	168.75	137.50	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Finance Manager	0.00	84.38	37.50	93.75	243.75	237.50	228.13	228.13	228.13	160.00	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50
Multimedia & Content Manager	0.00	50.00	25.00	12.50	212.50	212.50	225.00	225.00	225.00	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50
GUI Development Manager	0.00	156.25	231.25	171.88	156.25	109.38	109.38	109.38	109.38	100.00	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50
Marketing Manager	0.00	1375.01	100.01	1356.25	1946.89	1909.39	1637.52	1700.02	1655.65	1421.89	953.13	940.63	876.13	481.26	646.88	646.88	918.76	1153.14	1065.64	1243.77	131.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Estimated Total Wages Paid	0.00	131.25	25.00	200.00	375.00	381.25	256.25	256.25	256.25	234.38	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13	128.13
Project Manager	0.00	343.75	206.25	31.25	87.50	84.38	90.63	90.63	90.63	84.38	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50
QA & Documents Manager	0.00	287.50	96.88	131.25	328.13	328.13	340.63	340.63	340.63	353.13	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00
Software Manager	0.00	171.88	171.88	181.25	121.88	181.75	106.25	106.25	106.25	106.25	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50
Design Manager	0.00	150.00	381.25	475.00	406.25	390.63	281.25	343.75	308.38	168.75	137.50	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Finance Manager	0.00	84.38	37.50	93.75	243.75	237.50	228.13	228.13	228.13	160.00	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50	112.50
Multimedia & Content Manager	0.00	50.00	25.00	12.50	212.50	212.50	225.00	225.00	225.00	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50	87.50
GUI Development Manager	0.00	156.25	231.25	171.88	156.25	109.38	109.38	109.38	109.38	100.00	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50	37.50
Marketing Manager	0.00	1375.01	100.01	1356.25	1946.89	1909.39	1637.52	1700.02	1655.65	1421.89	953.13	940.63	876.13	481.26	646.88	646.88	918.76	1153.14	1065.64	1243.77	131.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Estimated Total Wages Out	0.00	0.00	0.00	0.00	0.00	0.00	90.24	90.51	90.78	91.06	91.33	91.61	91.88	92.16	92.43	92.70	92.97	93.24	93.51	93.78	94.05	94.32	94.59	94.86	95.13	95.40	95.67	95.94	96.21	96.48
Estimated Interest	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Loan With Interest (For Calculation Purposes)	0.00	0.00	0.00	0.00	0.00	0.00	30090.24	30180.75	30271.53	30362.39	30453.32	30544.53	30635.41	30726.57	30822.00	30914.87	31028.20	31293.99	31436.25	31590.97	31761.63	31901.81	32057.33	32214.52	32381.00	32548.00	32715.00	32882.00	33050.00	33218.00
Pent Accrued	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69	632.69
Pent Paid	0.00	0.00	0.00	2,530.76	0.00	0.00	1,898.07	0.00	0.00	1,898.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Utilities Accrued	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Utilities Paid	0.00	0.00	0.00	0.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
IT Infrastructure Accrued	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
IT Infrastructure Paid	0.00	0.00	0.00	0.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Estimated Total Overhead Cost	0.00	0.00	0.00	2,530.76	0.00	900.00	1,898.07	0.00	0.00	2,898.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										

Information: Cash Flow Forecast-SWEng Group Three Enterprise:

The following assumptions have been made to produce the Cash Flow Forecast:

- For calculating the wages:
 - It is assumed employees will work on a flexible schedule, akin to zero-hour contracts, to ensure deadlines are met. (This is realistic, as our group is a start-up and all employees are highly invested in the success of the product).
 - It is assumed all employees have an initial month-long trial period, after which they are paid on a weekly basis (ie: all employees are paid from the week in which the first loan payment is received).
- For loan interest calculations:
 - Following Financial Adviser clarification, compound interest is charged.
 - In addition, a prudent view has been adopted for the size of the loan required. (The amount needed is over rather understated in order to cover possible unforeseen expenses).
- For calculating the financial value of contracts:
 - It is assumed at this stage that no code signing is necessary for the purchase and selling of contracts.
 - It is assumed only two of the media will be bought-in or licensed.
 - It is assumed that the app used as a reference model will use all 6 forms of media required by the customer.
 - It is assumed the placement of the contract, the handover of the module code and the acceptance of the module by the purchaser group all occur between the deadline for all contracts to be agreed and filed and the first iteration (weeks of 26/2/2018, 5/3/2018 and 12/3/2018 respectively).
 - It is assumed the acceptance of the module by the purchaser group occurs in the week after the week when code is handed over.
 - It is assumed all contracts and payments are completed or made prior to the first iteration deadline in week of 12/3/2018.
 - It is assumed the cost of buying or licensing the code for the other two media is equal to the value at which our company sells the code we create for two media to other groups, and hence not impacting the closing balance. (This means the cost impact is neutral for the cash flow forecast).
 - It is assumed the conversion rate used to convert the example price for the developer license of a typical multimedia app in Java is accurate.
 - It is assumed the cost of any code modules bought-in or licensed is the same.
- Other assumptions made include:
 - The loan will be awarded.
 - The loan can be split into two payments in a ratio that is most beneficial for the group.
 - Most numbers can be rounded to the nearest penny and percentage weekly compound interest calculations can be rounded to five decimal places.
 - Interest is not an overhead.
 - The "app development" activity in the Work Breakdown Structure includes the time taken to write the code being sold to other groups or companies.
 - No costs other than those in the Finance Briefing Notes are to be considered (for example, costs of advertising are to be ignored because the product does not have a release date.)
 - All numbers used in the Cash Flow Forecast have been rounded to 2 decimal places.

Information: Wages:

- The following information is used to calculate the wages per job role per week.
- It is assumed that all employees will work as software engineers in order to reduce the number of employees required and to ensure that the product is created within the deadlines provided by the customer. (The Work Breakdown Structure, however, does allot each employee a separate section).
- A Work Plan is included in Appendix A. A Gantt Chart is included in Appendix B.

Work Breakdown Structure:

Project1_4								
ID	WBS	Task Mode	Task Name	Start	Finish	Duration	Work	
1								
2	1		Meetings				216 hrs	
3	1.1		Meeting 1	Mon 15/01/18	Mon 15/01/18	1 hr	8 hrs	
4	1.2		Meeting 2	Mon 22/01/18	Mon 22/01/18	1 hr	8 hrs	
5	1.3		Meeting 3	Mon 29/01/18	Mon 29/01/18	1 hr	8 hrs	
6	1.4		Meeting 4	Mon 05/02/18	Mon 05/02/18	1 hr	8 hrs	
7	1.5		Meeting 5	Mon 12/02/18	Mon 12/02/18	1 hr	8 hrs	
8	1.6		Meeting 6	Mon 19/02/18	Mon 19/02/18	1 hr	8 hrs	
9	1.7		Perform & document review 1	Mon 19/02/18	Mon 19/02/18	1 hr	8 hrs	
10	1.8		Meeting 7	Mon 26/02/18	Mon 26/02/18	1 hr	8 hrs	
11	1.9		Perform & document review 2	Mon 26/02/18	Mon 26/02/18	1 hr	8 hrs	
12	1.10		Meeting 8	Mon 05/03/18	Mon 05/03/18	1 hr	8 hrs	
13	1.11		Perform & document review 3	Mon 05/03/18	Mon 05/03/18	1 hr	8 hrs	
14	1.12		Meeting 9	Mon 12/03/18	Mon 12/03/18	1 hr	8 hrs	
15	1.13		Perform & document review 4	Mon 12/03/18	Mon 12/03/18	1 hr	8 hrs	
16	1.14		Meeting 10	Mon 16/04/18	Mon 16/04/18	1 hr	8 hrs	
17	1.15		Perform & document review 5	Mon 16/04/18	Mon 16/04/18	1 hr	8 hrs	
18	1.16		Meeting 11	Mon 23/04/18	Mon 23/04/18	1 hr	8 hrs	
19	1.17		Perform & document review 6	Mon 23/04/18	Mon 23/04/18	1 hr	8 hrs	
20	1.18		Meeting 12	Mon 30/04/18	Mon 30/04/18	1 hr	8 hrs	
21	1.19		Perform & document review 7	Mon 30/04/18	Mon 30/04/18	1 hr	8 hrs	
22	1.20		Meeting 13	Mon 07/05/18	Mon 07/05/18	1 hr	8 hrs	
23	1.21		Perform & document review 8	Mon 07/05/18	Mon 07/05/18	1 hr	8 hrs	
24	1.22		Meeting 14	Mon 14/05/18	Mon 14/05/18	1 hr	8 hrs	
25	1.23		Perform & document review 9	Mon 14/05/18	Mon 14/05/18	1 hr	8 hrs	
26	1.24		Meeting 15	Mon 21/05/18	Mon 21/05/18	1 hr	8 hrs	
27	1.25		Perform & document review 10	Mon 21/05/18	Mon 21/05/18	1 hr	8 hrs	
28	1.26		Meeting 16	Mon 28/05/18	Mon 28/05/18	1 hr	8 hrs	
29	1.27		Perform & document review 11	Mon 28/05/18	Mon 28/05/18	1 hr	8 hrs	
30								
31	2		Documentation	Mon 15/01/18	Mon 04/06/18	75.5 days?	332.43 hrs	
32	2.1		Generate Functional Specification Doc	Mon 15/01/18	Thu 18/01/18	2.75 days	55 hrs	
33	2.1.1		Generate sections of Functional Spec Doc	Mon 15/01/18	Wed 17/01/18	16 hrs	34 hrs	
34	2.1.2		Generate consumer User Stories	Mon 15/01/18	Tue 16/01/18	12 hrs	12 hrs	
35	2.1.3		Compile Functional Specification Doc	Wed 17/01/18	Thu 18/01/18	6 hrs	9 hrs	
36	2.2		Generate QA Manual	Thu 18/01/18	Wed 24/01/18	3.13 days	35 hrs	
37	2.2.1		Generate QA roles & responsibilities sections	Thu 18/01/18	Mon 22/01/18	6 hrs	20 hrs	
38	2.2.2		Compile QA Manual	Mon 22/01/18	Wed 24/01/18	15 hrs	15 hrs	
39	2.3		Generate WBS, GANNT & PERT	Fri 26/01/18	Thu 08/02/18	56 hrs	15.6 hrs	
40	2.4		Generate Project Wide Standard	Mon 12/02/18	Tue 13/02/18	1 day?	8 hrs	
41	2.5		Negotiate Inter-Group Contracts	Mon 15/01/18	Wed 14/02/18	138 hrs	2.77 hrs	
42	2.6		Create tender presentation	Mon 29/01/18	Thu 15/02/18	80 hrs	55 hrs	
43	2.7		Create product demo presentation	Tue 15/05/18	Fri 01/06/18	10 days?	96.67 hrs	
44	2.8		Compile hand in document of all deliverables	Fri 25/05/18	Mon 04/06/18	40 hrs	60.42 hrs	
45	2.9		Give Presentation	Mon 04/06/18	Mon 04/06/18	0.5 hrs	4 hrs	
46								
47	3		Finance	Mon 22/01/18	Fri 01/06/18	70.75 days	229.63 hrs	
48	3.1		Generate Financial Business Plan	Mon 22/01/18	Thu 08/02/18	10 days	60 hrs	
49	3.2		Generate Financial Report 1	Fri 09/02/18	Thu 22/02/18	56 hrs	35 hrs	
50	3.3		Generate Financial Report 2	Fri 23/02/18	Thu 08/03/18	56 hrs	35 hrs	
51	3.4		Generate Financial Report 3	Fri 09/03/18	Thu 03/05/18	240 hrs	40 hrs	
52	3.5		Generate Financial Summary Report	Fri 04/05/18	Thu 24/05/18	89 hrs	59.63 hrs	
53								
54	4		Research & Design	Mon 15/01/18	Thu 01/02/18	10.5 days?	103.83 hrs	
55	4.1		Research & analyze market	Mon 15/01/18	Thu 01/02/18	10 days	20 hrs	
56	4.2		Research advertisement revenue	Mon 15/01/18	Thu 01/02/18	10 days	8 hrs	
57	4.3		Develop sales strategies	Wed 24/01/18	Thu 01/02/18	5 days	20 hrs	
58	4.4		Design	Mon 15/01/18	Thu 01/02/18	10.5 days?	55.83 hrs	
59	4.4.1		Generate app mockups	Mon 15/01/18	Thu 01/02/18	72 hrs	35 hrs	
60	4.4.2		Design logo	Mon 15/01/18	Thu 01/02/18	80 hrs	5 hrs	
61	4.4.3		Create class diagrams	Wed 17/01/18	Thu 01/02/18	9 days?	15.83 hrs	
62								
63	5		Development	Fri 02/02/18	Wed 30/05/18	62.5 days?	1,032.53 hrs	
64	5.1		Source Media for App	Fri 02/02/18	Mon 09/04/18	35 days	40.8 hrs	
65	5.2		Generate icons for App	Fri 02/02/18	Mon 12/03/18	160 hrs	20 hrs	
66	5.3		Software	Fri 02/02/18	Wed 02/05/18	47.38 days	863.73 hrs	
67	5.3.1		GUI Development	Fri 02/02/18	Wed 02/05/18	47.38 days	343.32 hrs	
68	5.3.1.1		Prototype GUI Development	Fri 02/02/18	Thu 15/03/18	22.38 days?	229.87 hrs	

Project1_4								
ID		WBS	Task Mode	Task Name	Start	Finish	Duration	Work
69		5.3.1.2		Final GUI Development	Fri 16/03/18	Wed 02/05/18	25 days?	113.47 hrs
70		5.3.2		App development	Fri 02/02/18	Wed 02/05/18	47.38 days	520.42 hrs
71		5.3.2.1		Prototype app development	Fri 02/02/18	Thu 15/03/18	22.38 days	320.42 hrs
72		5.3.2.2		Final app development	Fri 16/03/18	Wed 02/05/18	200 hrs	200 hrs
73		5.4		Testing & analysis	Wed 02/05/18	Wed 30/05/18	15 days	108 hrs
74		5.4.1		GUI Testing	Wed 02/05/18	Thu 10/05/18	40 hrs	14 hrs
75		5.4.2		System Testing	Wed 02/05/18	Thu 10/05/18	40 hrs	74 hrs
76		5.4.3		Perform & gather consumer feedback	Fri 11/05/18	Wed 30/05/18	80 hrs	20 hrs
77								
78		6		Deliverables	Fri 02/02/18	Thu 07/06/18	66.75 days	0 hrs
79		6.1		Functional Spec to supervisor	Fri 02/02/18	Fri 02/02/18	0 days	0 hrs
80		6.2		QA Manual uploaded to repository	Mon 05/02/18	Mon 05/02/18	0 days	0 hrs
81		6.3		Financial Business Plan submission	Fri 09/02/18	Fri 09/02/18	0 days	0 hrs
82		6.4		PWS Agreed between groups	Thu 15/02/18	Thu 15/02/18	0 days	0 hrs
83		6.5		Group tender presentations	Mon 19/02/18	Mon 19/02/18	0 days	0 hrs
84		6.6		Financial Report 1 submission	Fri 23/02/18	Fri 23/02/18	0 days	0 hrs
85		6.7		All contracts agreed and filed	Tue 27/02/18	Tue 27/02/18	0 days	0 hrs
86		6.8		Financial Report 2 submission	Fri 09/03/18	Fri 09/03/18	0 days	0 hrs
87		6.9		First iteration complete	Fri 16/03/18	Fri 16/03/18	0 days	0 hrs
88		6.10		Final test & integration plan	Fri 16/03/18	Fri 16/03/18	0 days	0 hrs
89		6.11		Financial Report 3 submission	Fri 04/05/18	Fri 04/05/18	0 days	0 hrs
90		6.12		Financial Summary Report submission	Fri 25/05/18	Fri 25/05/18	0 days	0 hrs
91		6.13		Demonstration / Sales presentation	Mon 04/06/18	Mon 04/06/18	0 days	0 hrs
92		6.14		Hand in of all deliverables	Thu 07/06/18	Thu 07/06/18	0 days	0 hrs

Resource Plan:

Resource Name	Work (hrs) Wages(£)																	
	Total	08-Jan	15-Jan	22-Jan	29-Jan	05-Feb	12-Feb	19-Feb	26-Feb	05-Mar	12-Mar	19-Mar	26-Mar	02-Apr	09-Apr			
Project Manager	315.5	0	£0.00	11	£131.25	2	£25.00	16	£200.00	30	£375.00	30.5	£381.25	20.5	£256.25	20.5	£256.25	20.5
QA & Documents Manager	173.5	0	£0.00	28	£343.75	16.5	£206.25	2.5	£31.25	7	£87.50	6.75	£84.38	7.25	£90.63	7.25	£90.63	6.75
Software Manager	360.25	0	£0.00	23	£287.50	7.75	£96.88	10.5	£131.25	26.25	£328.13	26.25	£328.13	27.25	£340.63	27.25	£340.63	28.25
Design Manager	149.5	0	£0.00	14	£171.88	13.75	£171.88	14.5	£181.25	9.75	£121.88	9.5	£118.75	8.5	£106.25	8.5	£106.25	8.5
Finance Manager	352	0	£0.00	12	£150.00	30.5	£381.25	38	£475.00	32.5	£406.25	31.25	£390.63	22.5	£281.25	27.5	£343.75	24.75
Multimedia & Content Manager	204.5	0	£0.00	6.8	£84.38	3	£37.50	7.5	£93.75	19.5	£243.75	19	£237.50	18.25	£228.13	18.25	£228.13	12
GUI Developer	181.75	0	£0.00	4	£50.00	2	£25.00	1	£12.50	17	£212.50	17	£212.50	18	£225.00	18	£225.00	18
Marketing Manager	187	0	£0.00	13	£156.25	12.5	£156.25	18.5	£231.25	13.75	£171.88	12.5	£156.25	8.75	£109.38	8.75	£109.38	8
Total	1924	0	£0.00	110	£1,375.01	88	£1,100.01	108.5	£1,356.25	155.75	£1,946.89	152.75	£1,909.39	131	£1,637.52	136	£1,700.02	133.25
Total Cost of Labour																		

Resource Name	Work (hrs) Wages(£)																	
	Total	26-Feb	05-Mar	12-Mar	19-Mar	26-Mar	02-Apr	09-Apr	16-Apr	23-Apr	30-Apr	07-May	14-May	21-May	28-May	04-Jun		
Project Manager	315.5	20.5	£256.25	20.5	£256.25	18.75	£234.3800	10.25	£128.13	10.25	£128.13	10.25	£128.13	12.25	£153.13	12.75	£159.38	11
QA & Documents Manager	173.5	7.25	£90.63	7.25	£90.63	6.75	£84.3800	3	£37.50	3	£37.50	3	£37.50	5	£62.50	5	£62.50	11.5
Software Manager	360.25	27.25	£340.63	27.25	£340.63	28.25	£353.1300	30	£375.00	30	£375.00	30	£375.00	2	£25.00	2	£25.00	14
Design Manager	149.5	8.5	£106.25	8.5	£106.25	8.5	£106.2500	3	£37.50	3	£37.50	3	£37.50	5	£62.50	4.75	£59.38	4.25
Finance Manager	352	27.5	£343.75	24.75	£309.38	13.5	£168.7500	11	£137.50	10	£125.00	5	£62.50	7	£87.50	9.5	£118.75	22.25
Multimedia & Content Manager	204.5	18.25	£228.13	18.25	£228.13	12	£150.0000	9	£112.50	9	£112.50	5.25	£65.63	6.5	£81.25	6.5	£81.25	5.5
GUI Developer	181.75	18	£225.00	18	£225.00	18	£225.0000	7	£87.50	7	£87.50	7	£87.50	9	£112.50	9	£112.50	8.5
Marketing Manager	187	8.75	£109.38	8.75	£109.38	8	£100.0000	3	£37.50	3	£37.50	3	£37.50	5	£62.50	5	£62.50	7
Total	1924	136	£1,700.02	133.25	£1,665.65	113.75	£1,421.8900	76.25	£953.13	75.25	£940.63	70.25	£878.13	38.5	£481.26	51.75	£646.88	51.75
Total Cost of Labour																		

Please note:

- The hours have been rounded to the nearest quarter hour.
- The wages have been rounded to the nearest 2 decimal places.
- Due to the above assumptions/statements, there is a slight discrepancy between the total wages if they were calculated by multiplying the total hours for each week by the labour rate and the total wages if they were calculated by adding together the wages per role for that week. To maintain consistency with the cash flow, the latter method has been used.

Information: Contracts:

- Whilst the contracts values have no impact on the group's Cash Flow Forecast for the development phase of the app, in order to choose an accurate value I carried out online research did uncover an e-commerce app on Binpress [1] (Appendix C contains a hard copy of the webpage) that is similar but not the same as our product, that does comply with our customer requirements from the customer, and can be created for an Android platform in Java.
- The app's Developer License was \$499.99, using current conversion rates [2], this means the Developer License was £384.34
- Assuming that the relevant app can be used to price contracts utilising all 6 forms of media required by the customer:
 - $\frac{384.34}{6} = £64.05\dot{6}$ per form of media.
 - Therefore, we believe the cost of licensing/buying-in two forms of media is $2(£64.05\dot{6}) = £128.11\dot{3} = £128.11$ (rounded to the nearest whole penny)

[1]"E-Commerce Android App | Java | Android", *Binpress*, 2018. [Online]. Available: <http://www.binpress.com/app/ecommerce-android-app/4363>. [Accessed: 09- Feb- 2018].

[2]"Currency Converter – Google Finance", *Finance.google.com*, 2018.[Online]. Available: <https://finance.google.com/finance/converter>. [Accessed: 09- Feb- 2018].

Information: Interest and Estimated Loan Required:

- Using the specified 16.86% APR, the estimated loan required is:
 - £42,834.81 per the cash flow forecast without interest (the Closing Balance at the end of the development phase).
 - £45,049.34 per the cash flow forecast with interest (the Closing Balance at the end of the development phase with interest).
 - Therefore, the estimated loan required would be £50,000. (This is rounded up to allow for possible unforeseeable excess expenditure).
- Assuming the loan can be split in a ratio beneficial to the group, the £50,000 loan cash inflows are therefore split:
 - £30,000 for the first loan payment.
 - £20,000 for the second loan payment.
- The weekly interest percentage used in our cash flow forecast for the development phase:
 - Uses the formula:
 - Compound Interest Rate = CIR = $(1+r)^{52} - 1 = 16.86\%$ (The CIR has been given.)
 - r = the weekly interest percentage.
 - And therefore, $r = \sqrt[52]{(0.1686 + 1)} - 1 = 0.003000771234 \dots = 0.30008\%$ (rounded to 5 decimal places).

Information: Overhead Recovery Rate Analysis:

- The following table shows our cumulative Overhead Recovery Rate forecast for the development phase of our product:

Week Commencing	Total Overheads (£)	Cumulative Total Overheads (£)	Direct Labour Hours	Cumulative Direct Labour Hours	Cumulative Overhead Recovery Rate (£ per Hour)
8/1/2018			No direct labour hours this week.		
15/1/2018	0.00	0.00	0	0.00	0.00
22/1/2018	0.00	0.00	110	110.00	0.00
29/1/2018	2,530.76	2,530.77	88	198.00	12.78
5/2/2018	0.00	2,530.76	108.5	306.50	8.26
12/2/2018	900.00	3,430.76	155.75	462.25	7.42
19/2/2018	1,898.07	5,328.83	152.75	615	8.66
26/2/2018	0.00	5,328.83	131	746	7.14
5/3/2018	0.00	5,328.83	136	882	6.04
12/3/2018	2,498.07	7,826.90	133.25	1015.25	7.71
19/3/2018	0.00	7,826.90	113.75	1129	6.93
26/3/2018	0.00	7,826.90	76.25	1205.25	6.49
2/4/2018	0.00	7,826.90	75.25	1280.5	6.11
9/4/2018	0.00	7,826.90	70.25	1350.75	5.79
16/4/2018	0.00	7,826.90	38.5	1389.25	5.63
23/4/2018	0.00	7,826.90	51.75	1441	5.43
30/4/2018	0.00	7,826.90	51.75	1492.75	5.24
7/5/2018	5,601.52	13,428.42	73.5	1566.25	8.57
14/5/2018	0.00	13,428.42	92.25	1658.5	8.10
21/5/2018	1,500.00	14,928.42	70.25	1728.75	8.64
28/5/2018	1,898.07	16,826.49	85.25	1814	9.28
4/6/2018	0.00	16,826.49	99.5	1913.5	8.79
11/6/2018	0.00	16,826.49	10.5	1924	8.75
18/6/2018	2,498.07	19,324.56	0	1924	10.04

- Therefore, the Overhead Recovery Rate for our product remains below £11 per hour throughout product development.

Summary:

- We are SWEng Group Three (SG3) Enterprise, and our product Hands Off is an innovative app aimed towards young adults. Our app provides recipes, cooking tips, exclusive deals, discounts, and giveaways as well as the ability to complete recipes with minimal use of their hands.
- Our estimated loan requirement is £50,000, preferably paid as £30,000 for the first instalment and £20,000 for the second instalment.