

This document provides in clear all the information that was used during the F1 Strategy Competition with the exception of race strategy.

The expected results are run using a simple code that simulates theoretical seasons. This code is comprised of two modules. The first of these modules is the same as the one used during the (livestreamed) driver signing phase. It is optional and allocates the available drivers to the competing teams based on their marketing investments and using the same probability law. The second module takes the team lineups (reliability, chassis, engine, driver 1 and driver 2) and ranks the drivers on each circuit as a function of their performance level, taking into account circuit-specific bonuses. The module then applies a DNF filter to the ranking with probability in line with the team reliability investment and attributes points to the remaining drivers in their ranking order. The point attribution and the race characteristics are as specified in the championship rules.

For Section 1, the code is run with a loop around both of these modules to average results over 10^7 seasons. For Section 2, the code is run in the same way except that the driver signing module is deactivated and the lineup is set to the one determined by the driver signing event for each simulated season.

Expected points scored are accurate to the tenth of point, while no formal accuracy study has been performed for the ranking probabilities. These probabilities should, however, reflect the performance of the teams with an error inferior to one percent.

1 Financial phase

1.1 Drivers

- Ricardo Raul (BRA) 5.0
- Joris Gootjes (NED) 4.7
- Alfredo Alcarria (SPA) 4.5
- Fabrizio Panduri (ITA) 4.4
- Allan Johnson (GBR) 4.2
- David Wilkinson (GBR) 3.9
- Michel Fabron (FRA) 3.4
- Simao Faria (POR) 3.2
- Carlos Arizaga (ARG) 3.0
- Luigi Disanti (ITA) 2.8
- Philipp Krafft (GER) 2.7
- Germain Grisel (FRA) 2.2
- Akiko Tomiko (JAP) 1.9
- Fabian Metzger (SWI) 1.7
- Aaron Kilpatrick (IRL) 1.5
- Felix Wollen (GER) 1.4
- Jiang Lin (CHI) 1.2
- Alfonso Llave (SPA) 0.9
- Josh Palmer (AUS) 0.5
- Mitesh Agrawal (IND) 0.0

1.2 Teams

Team	Name	Affiliation	Mark.	Rel.	Cha.	Eng.
AJ Racing	Alex Watson	Leeds	0.0	2.5	0.0	5.5
BURP	Cédric Beaume	Leeds	0.3	2.1	5.6	0.0
Goatifi Ltd.	Elliot Eason	Leeds	3.1	2.1	0.0	2.8
HamiltonianCRCT	Isabelle Telford	UMass Amherst	1.1	2.3	1.7	2.9
McGrath Motors	Michael McGrath	Leeds	2.7	2.0	1.8	1.5
Mistral Junior	Girindra Ramgobin	Leeds	1.0	2.0	2.3	2.5
Pulp Friction	Lydia King	Leeds	2.9	2.1	1.3	1.7
Shiva	Barthendu Sharma	Dublin City	2.2	2.2	1.8	1.8
Vader GP	Ethan Varley	Leeds	1.8	2.6	1.8	1.8
Wase's Pacers	Esme Wase	Leeds	1.2	2.2	2.3	2.3

Table 1: Table of the teams registered and their investment strategies. Note: a penalty was applied to Mistral Junior for missing the deadline, they loss 0.2 ι in Reliability.

1.3 Expected results

	AJ Racing (Leeds)	BURP (Leeds)	Goatifi Ltd. (Leeds)	HamiltonianCRCT (UMass)	McGrath Motors (Leeds)	Mistral Junior (Leeds)	Pulp Friction (Leeds)	Shiva (Dublin City)	Vader GP (Leeds)	Wase's Pacers (Leeds)
Pts	75	89	102	62	112	53	100	101	63	73
1 st	0.0%	2.1%	9.7%	6.7%	22.2%	4.2%	13.9%	22.2%	12.2%	8.8%
2 nd	0.0%	1.9%	20.4%	6.0%	17.9%	5.4%	17.5%	14.2%	9.0%	7.7%
3 rd	0.8%	13.8%	19.1%	7.7%	13.1%	6.9%	14.6%	9.2%	5.5%	9.3%
4 th	8.4%	30.8%	12.5%	7.1%	8.5%	5.5%	10.0%	5.4%	3.1%	8.7%
5 th	28.6%	26.8%	8.4%	5.5%	6.1%	4.1%	7.5%	3.7%	2.2%	7.0%
6 th	41.1%	16.6%	7.8%	4.8%	5.8%	4.3%	7.5%	3.6%	2.2%	6.4%
7 th	18.1%	8.1%	9.7%	8.4%	9.2%	9.4%	11.2%	9.5%	7.0%	9.4%
8 th	2.7%	1.7%	6.4%	16.6%	7.6%	17.6%	8.3%	11.9%	11.8%	15.4%
9 th	0.2%	0.2%	3.2%	17.5%	5.6%	22.3%	4.7%	11.9%	21.4%	13.1%
10 th	0.0%	0.0%	2.8%	19.6%	4.0%	20.4%	4.8%	8.3%	25.8%	14.3%

Table 2: Expected team results in terms of number of points and ranking probability at the end of the season.

2 Pre-season

2.1 Lineups

- AJ Racing (Leeds): Josh Palmer (0.5)–Mitesh Agrawal (0.0)
- BURP (Leeds): Jiang Lin (1.2)–Alfonso Llave (0.9)
- Goatifi Ltd. (Leeds): Simao Faria (3.2)–Carlos Arizaga (3.0)
- HamiltonianCRCT (UMass): Akiko Tomiko (1.9)–Fabian Metzger (1.7)
- McGrath Motors (Leeds): Alfredo Alcarria (4.5)–David Wilkinson (3.9)
- Mistral Junior (Leeds): Allan Johnson (4.2)–Germain Grisel (2.2)
- Pulp Friction (Leeds): Joris Gootjes (4.7)–Michel Fabron (3.4)
- Shiva (Dublin City): Ricardo Raul (5.0)–Fabrizio Panduri (4.4)
- Vader GP (Leeds): Luigi Disanti (2.8)–Philipp Krafft (2.7)
- Wase’s Pacers (Leeds): Aaron Kilpatrick (1.5)–Felix Wollen (1.4)

2.2 Expected results

Pos	Driver	Team	Points	Pos	Driver	Team	Points
1	Allan JOHNSON	Mistral Junior	141	11	Mitesh AGRAWAL	AJ Racing	28
2	Ricardo RAUL	Shiva	127	12	Akiko TOMIKO	HamiltonianCRCT	28
3	Fabrizio PANDURI	Shiva	100	13	Luigi DISANTI	Vader GP	14
4	Alfredo ALCARRIA	McGrath Motors	66	14	Michel FABRON	Pulp Friction	13
5	Joris GOOTJES	Pulp Friction	62	15	Fabian METZGER	HamiltonianCRCT	8
6	Jiang LIN	BURP	53	16	Simao FARIA	Goatifi Ltd.	6
7	Germain GRISEL	Mistral Junior	50	17	Philipp KRAFFT	Vader GP	6
8	Josh PALMER	AJ Racing	40	18	Aaron KILPATRICK	Wase’s Pacers	5
9	David WILKINSON	McGrath Motors	40	19	Felix WOLLEN	Wase’s Pacers	2
10	Alfonso LLAVE	BURP	39	20	Carlos ARIZAGA	Goatifi Ltd.	2

Table 3: Expected driver results.

	AJ Racing (Leeds)	BURP (Leeds)	Goatifi Ltd. (Leeds)	HamiltonianCRCT (UMass)	McGrath Motors (Leeds)	Mistral Junior (Leeds)	Pulp Friction (Leeds)	Shiva (Dublin City)	Vader GP (Leeds)	Wase’s Pacers (Leeds)
Pts	68	92	8	36	106	190	76	228	19	7
1 st	0.0%	0.0%	0.0%	0.0%	0.0%	17.5%	0.0%	82.5%	0.0%	0.0%
2 nd	0.0%	0.1%	0.0%	0.0%	1.0%	81.3%	0.0%	17.5%	0.0%	0.0%
3 rd	0.1%	25.6%	0.0%	0.0%	69.8%	1.0%	3.4%	0.0%	0.0%	0.0%
4 th	5.6%	51.3%	0.0%	0.0%	21.8%	0.1%	21.1%	0.0%	0.0%	0.0%
5 th	33.4%	14.6%	0.0%	0.1%	5.8%	0.0%	46.1%	0.0%	0.0%	0.0%
6 th	58.9%	8.0%	0.0%	2.8%	1.6%	0.0%	28.8%	0.0%	0.0%	0.0%
7 th	1.9%	0.3%	0.0%	95.2%	0.0%	0.0%	0.6%	0.0%	2.0%	0.0%
8 th	0.1%	0.0%	2.6%	1.9%	0.0%	0.0%	0.0%	0.0%	93.8%	1.5%
9 th	0.0%	0.0%	52.6%	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	43.7%
10 th	0.0%	0.0%	44.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	54.8%

Table 4: Expected team results.

3 Results

Rk	Firstname	LASTNAME	NAT Team	SPA	BEL	USA	JAP	CAN	HUN	MON	ITA	FRA	AUS	TOTAL
1	Ricardo	RAUL	BRA Shiva	20	6	11 th	8	4	8	13	DNF	8	20	87
2	Akiko	TOMIKO	JAP HamiltonianCRCT	6	10	20	2	13	6	4	4	20	11 th	85
3	Alfonso	LLAVE	SPA BURP	16	13	DNF	6	DNF	16	11 th	13 th	16	13	80
4	Jiang	LIN	CHI BURP	13	20	DNF	DNF	10	20	DNF	12 th	10	4	77
5	Joris	GOOTJES	NED Pulp Friction	10	2	1	1	8	13 th	10	13	DNF	16	61
6	Luigi	DISANTI	ITA Vader GP	1	DNF	13	13	1	4	6	1	13	8	60
7	Fabrizio	PANDURI	ITA Shiva	DNF	3	12 th	DNF	20	13	20	DNF	2	DNF	58
8	Allan	JOHNSON	GBR Mistral Junior	4	13 th	DNF	20	DNF	10	16	3	16 th	2	55
9	Fabian	METZGER	SWI HamiltonianCRCT	2	16	10	11 th	2	3	DNF	10	6	DNF	49
10	Alfredo	ALCARRIA	SPA McGrath Motors	DNF	4	4	16	16	DNF	DNF	DNF	14 th	6	46
11	Philipp	KRAFFT	GER Vader GP	13 th	12 th	16	3	6	1	DNF	6	DNF	3	35
12	Josh	PALMER	AUS AJ Racing	3	8	13 th	13 th	11 th	12 th	12 th	20	1	12 th	32
13	Mitesh	AGRAWAL	IND AJ Racing	16 th	1	6	14 th	14 th	15 th	15 th	16	DNF	16 th	23
14	David	WILKINSON	GBR McGrath Motors	14 th	11 th	14 th	10	DNF	11 th	1	15 th	13 th	10	21
15	Michel	FABRON	FRA Pulp Friction	12 th	DNF	3	15 th	13 th	18 th	8	8	15 th	15 th	19
16	Aaron	KILPATRICK	IRL Wase's Pacers	18 th	DNF	8	4	3	2	DNF	2	11 th	18 th	19
17	Germain	GRISEL	FRA Mistral Junior	8	DNF	2	DNF	DNF	DNF	13 th	DNF	17 th	1	11
18	Simao	FARIA	POR Goatifi Ltd.	15 th	15 th	DNF	DNF	DNF	16 th	2	11 th	3	13 th	5
19	Felix	WOLLEN	GER Wase's Pacers	17 th	16 th	DNF	DNF	15 th	17 th	14 th	14 th	4	17 th	4
20	Carlos	ARIZAGA	ARG Goatifi Ltd.	11 th	14 th	DNF	12 th	12 th	14 th	3	DNF	12 th	14 th	3

Figure 1: Drivers championship final standings.

Rk	Team	University	SPA	BEL	USA	JAP	CAN	HUN	MON	ITA	FRA	AUS	TOTAL
1	BURP	Leeds	29	33	DNF	6	10	36	11 th	12 th	26	17	157
2	Shiva	Dublin City	20	9	11 th	8	24	21	33	DNF	10	20	145
3	HamiltonianCRCT	U. Mass. Amherst	8	26	30	2	15	9	4	14	26	11 th	134
4	Vader GP	Leeds	1	12 th	29	16	7	5	6	7	13	11	95
5	Pulp Friction	Leeds	10	2	4	1	8	13 th	18	21	15 th	16	80
6	McGrath Motors	Leeds	14 th	4	4	26	16	11 th	1	15 th	13 th	16	67
7	Mistral Junior	Leeds	12	13 th	2	20	DNF	10	16	3	16 th	3	66
8	AJ Racing	Leeds	3	9	6	13 th	11 th	12 th	12 th	36	1	12 th	55
9	Wase's Pacers	Leeds	17 th	16 th	8	4	3	2	14 th	2	4	17 th	23
10	Goatifi Ltd.	Leeds	11 th	14 th	DNF	12 th	12 th	14 th	5	11 th	3	13 th	8

Figure 2: Team championship final standings.