QDS
Hacks
20

Abstract

QDS20 is the BCITSA's first experiential learning event which bridges students from multiple disciplines. This document highlights the objectives of the event, the outcomes, the financials, the attendees, and post-event survey results.

Justin Cervantes
president@bcitsa.ca

Purpose of QDS20

Event Objectives

- Learn practical applications of creating insight from data

  Students learned many tools which are related to created data, such as python's pandis library, R, and data visualization libraries (not used in the majority of attendees' curriculum). ✔

  Students explored technical stacks not known to them. Students were exposed to different things ranging from JavaScript frameworks like React and Angular (heavily in demand in the workforce) to MAC ID detection on smartphones. ✔

- Impart the realities of working with students from different educational backgrounds

  25 multidisciplinary teams were formed, wherein each team had at least one member from the School of Business and the rest of the team composed of computing students. ✔

  Anecdotal feedback was received regarding the impact of working with computing students for the first time – they were harder to manage and communicate with than many business students expected, and so this posed an area of developing skills in dealing with different people. ✔

- Realization of weaknesses and strengths for all participants

  This is unquantifiable, and was also not measured during the post-event survey ✕

Initial Scope of Questions and Intent

The event is themed after data analytics. The primary reason for this is because our first and most critical supporter, BCIT Computing, mentioned there might be funds available if the event falls within the theme of data analytics as there is a centre of excellence in the school which might support the event.

The event started by pushing for cross collaboration between schools. Initially, the event organizer started with creating questions that would engage as many students as possible while still maintaining a sense of data analytics. The original list of questions were:

1. **Analytics in Marketing:** Design a solution which find the most influential person in the room according to Instagram from a list of names. Target industry partner - Hootsuite.

2. **Analytics in the Environment:** Create a solution which will help forest fire fighters better manage wildfires, and which integrates with the data set given on historic burn areas. Target industry partner - BC Gov.
3. **Analytics for Community Issues:** Lost animals are tracked by the City of Vancouver Animal Services. Design a tool which uses the City of Vancouver Lost Animal data set and helps pet owners find their pets faster. Target industry partner – City of Vancouver
4. **Analytics in Banking:** Design a solution which allows me to see a log of credit card transactions across many clients. Identify which 3 transactions at the end of the month were fraudulent. Target industry partner – VanCity
5. **Analytics in Telecommunications:** Design a program which helps telecommunications providers better serve customers. Scan phone records of many customers over a period of time and identify which customers are not on the correct plan (ie I pay $110 per month for 10GBs of data, but only use 1). Target industry partner – TELUS
6. **Analytics in Event Management:** A struggle that free community service events have is that there is a lack of data with respect to participation and engagement. Design a system which will track the number of unique visitors to an event that does not require someone manually registering guests. Target industry partner – BCIT SA
7. **Analytics in Energy Efficiency:** BCIT owns and operates a large server room. Managing the cost of cooling the room while maintaining optimal performance of the servers is an important consideration for the IT department. Come up with a solution which will identify the optimal cooling strategy for the room based on temperature sensors and estimate the cost savings. Target industry partner – BCIT

Questions Posed to Participants

Eventually, after pairing down which APIs/datasets were usable, only a few challenges remained. The data ultimately dictated the questions, which ultimately dictated the audience.

Crime in Vancouver
Use publicly available data to identify where drug dens are emerging in Vancouver.
Data Clues: City of Vancouver Open Data Catalog, VPD Open Data Catalog

Mining Operations
Use private data, provided by Teck resources, to pinpoint operational efficiencies in their open mines.
Data Clues: Hundreds of MBs of data were offered to students in JSON format for this event.

Metered Parking
Create a solution which will help people in large cities like Vancouver or Toronto park without paying!
Data clues: City of Vancouver/Toronto's Open Data Catalog

Event Management
Design a system which will track the number of unique visitors to an event that does not require someone manually registering guests.
Data sets: None, this challenge is focused on acquiring and managing data

Open Category
Do anything you want as long as it transforms raw data into insight.

Students Served by QDS20

Graphic Design or UX/UI Student	5
Business Student	20
Term 3 or Higher Computing Student	35
General Entry Student	15
Computing Co-op Student	49
Volunteer	8

Total Volounteers: 8

Total Tickets Sold: 131

Total Participants: 124

Total No-Shows: 7

Roster of Preliminary and Final Stage Judges

Preliminary Round Judges

Juan Azmitia	IT Management Faculty, BCIT
Laura Barreca	Entrepreneurship Manager, BCITSA
Serghey Bhukarov	Director of Enterprise Applications, SkyHive
Amy Goldlist	OPSMAN Faculty, BCIT
Ross Haleliuk	Product Owner, Mogo
Henry Leung	Faculty, BCIT Digital Design and Development
Gil Min	Software Developer, Amazon
Arman Mottaghi	Founder, StepWin/Lambda Sciences, Lead AI/ML Instructor for 7Gate Ventures
Joan Pascual	Experiential Learning Program Coordinator, BCIT
Jacob Steiner	Founder, Homer
Donna Turner	Computing Faculty, BCIT
Cynthia Van Ginkel	Business Development Manager, BCIT
Steve Wilson	Analytics and Cybersecurity Faculty, BCIT
Juan's Guest, Visitor	PhD in AI/ML, Professor from Brazil

Final Round Judges

Caroline Gagnon	Executive Director, BCITSA
Steve Eccles	Former Dean SoCAS, CEO Northeastern University Vancouver
Mike Starkey	Associate Dean SOCAS, retired IBM Senior Executive
Rene Cravioto	Program Manager of Enterprise Data and Analytics, City of Vancouver
Fariba Pacheleh	Director of Corporate Projects, BCLDB and Chair of the BCIT Computing Program Advisory Committee

Labour Investment

Summary of Costs and Revenues

Costs

A&B Rentals (Tables and Chairs)	1466.15
Volounteer Training Dinner (Pizza)	58.49
Friday Night Dinner	573.84
Friday Night Dinner (Vegan)	26.99
Food Tickets (Raffle Tickets)	10.91
Extensions Cord and Batteries for Mic	38.65
Costco Run (Saturday and Sunday Breakfast, Snacks and Fruit)	1177.54
Saturday Dinner (City Core)	5283.19
Sunday Lunch (Subway)	1390.52
Saturday Lunch (Taco bar)	2409.75
Thank you gifts (volunteers)	375.11
Prize Money	1500
Townsquare Rentals	1274

Room setup   52.5

Total Costs (Excluding Labour Estimates) = **15,637.50**

Total cost for Marketing time value is **200.5 (pre-event marketing, day of logistics) hours and $5255**

Total cost for Student Services time value is **34 hours (day of support) $1170.85**

Total cost for labour = **$6,425.85**

Total Costs (Including Labour) = <u>**22,063.35**</u>

Revenues

Presenting Sponsor   7000

Gold Sponsors (x2)   10000

Ticket Sales   1493.31

Presale Ticket Bundle to Co-op (50 tickets)   500

Total Revenue = **18,993.31**

Event Total

$ 3,351.81 in surplus (excludes labour)

**$ -3,07004 in surplus (includes labour)**

Event Feedback

The event survey was sent out on January 14 (Tuesday), two days after the end of the event.

7/124 Attendees no showed, however the total ratio of respondents was kept at 124 as the same email list was used for the survey message.

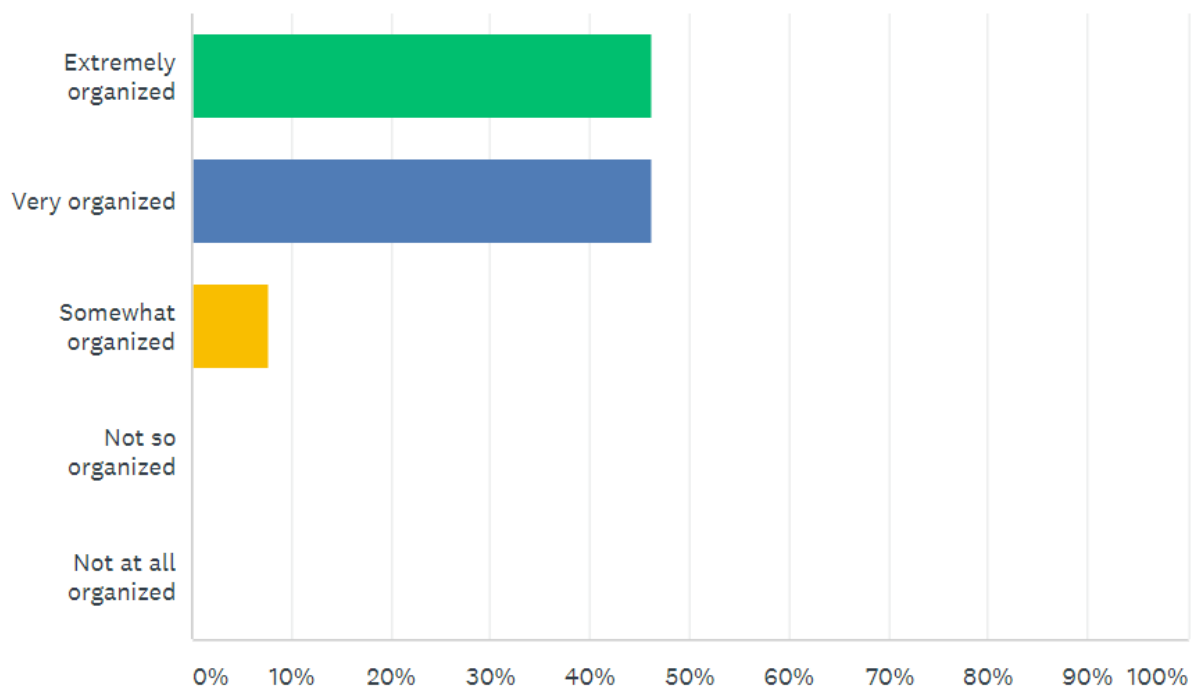**Total Respondents:** 26 / 124 (21% of attendees replied to the survey)

How likely is it that you would recommend the event to a friend or colleague?
Answered: 24, Skipped: 2

DETRACTORS (0-6)	PASSIVES (7-8)	PROMOTERS (9-10)	NET PROMOTER® SCORE
8% 2	17% 4	75% 18	67
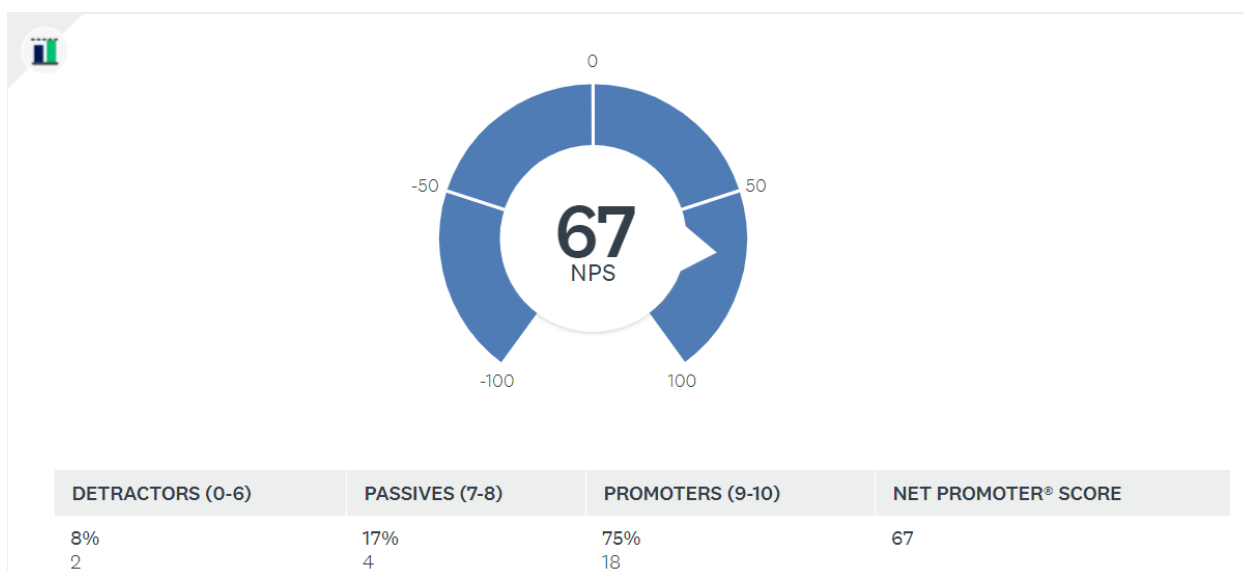
How organized was the event?

Answered: 26, Skipped: 0

ANSWER CHOICES ▼	RESPONSES ▼	
▼ Extremely organized	46.15%	12
▼ Very organized	46.15%	12
▼ Somewhat organized	7.69%	2
▼ Not so organized	0.00%	0
▼ Not at all organized	0.00%	0
TOTAL	26	

ANSWER CHOICES ▼	RESPONSES ▼	
▼ Extremely organized	46.15%	12
▼ Very organized	46.15%	12
▼ Somewhat organized	7.69%	2
▼ Not so organized	0.00%	0
▼ Not at all organized	0.00%	0
TOTAL	26	

Was the event length too long, too short or about right?

Answered: 26, Skipped: 0
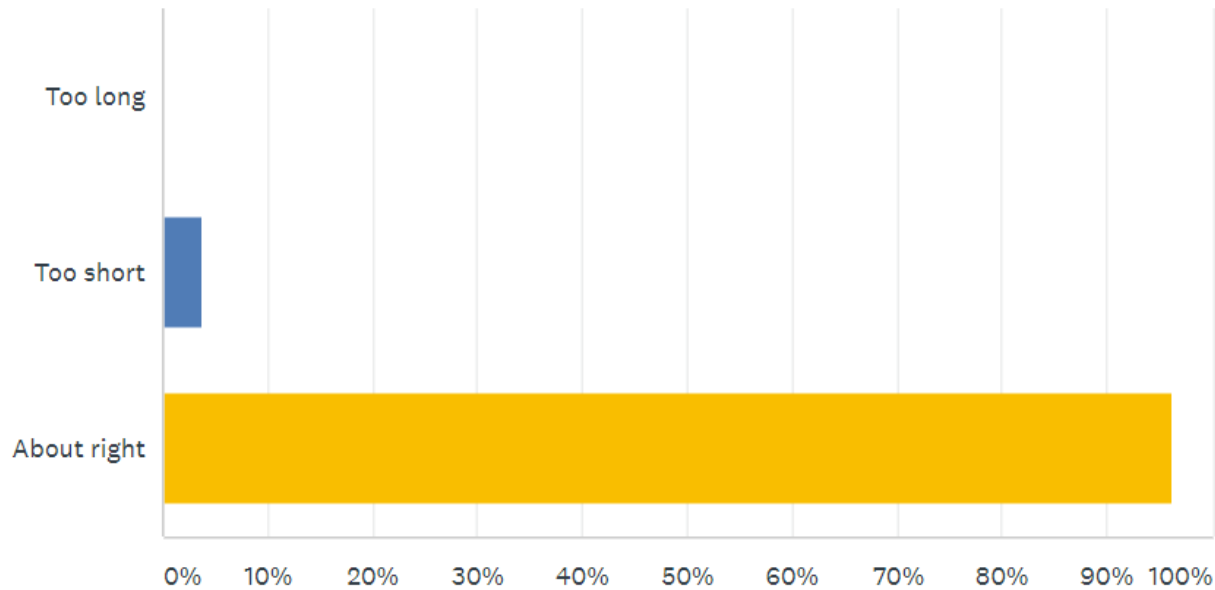
ANSWER CHOICES	RESPONSES	
▼ Too long	0.00%	0
▼ Too short	3.85%	1
▼ About right	96.15%	25
TOTAL	26	

What did you like about the event?

Answered: 22, Skipped: 4

the variety of topics to choose for hackathon the food and organization
There were a lot of food and space accomodation. The mentors were also helpful and offer lots of guidance.
the food
Well organized, really fun
Very well organized event, I got great experience and met lots of awesome people!
The food was prepared and the environment to focus on the hackathon was good.
As a business student, it gave me an opportunity to work with others outside my faculty. I learned a lot through working with my team mates, as well as gained valuable experience that will help me work in tech.
I liked the premade teams, it forces you to communicate with people you are unfamiliar with. It required you to get to know each others styles very quickly in order to succeed, an interesting challenge.
I like the theme of the hackathon and the dedication of volunteers and organizers. In addition, At some point, I liked the organizers helped us form a team in advance. However, I may not have an opportunity to meet other new people and form a team by myself. Overall, it was a great experience. Well done to organize the first hackathon ever at BCIT!
Teams were well balanced. Easy to ask questions to mentors.
It was a great learning experience.
The event flowed well, all events occurred on time. We were well fed.

| |
|---|
| The fact that it was "open" category, as long as we achieved the objective of having insight. Also the balance in each team contributed a lot. |
| I really enjoyed the different perspective the business student brought to my team. It was really interesting to see their thought process. I also personally enjoyed the assigned teams and how they were balanced. Maybe its bias but overall I felt they were fair. Also, the sheer amount of coffee throughout the event was impressive to say the least. |
| collaboration with people who I've never met before, it was something I've never really tried before and it worked well |
| Food and availability of study rooms that were good places to work |
| Being put into fair, random teams. Great food. Very friendly organizers. |
| It was organized and the contestants were well taken care of. |
| The networking! Also working with other students from comp sci. |
| Great opportunity to network and work as a team. Also looks good on a resume. |
| I learned a ton and beefed up my resume. |
| Concept |

What did you dislike about the event?
Answered: 19, Skipped: 7

not enough mentors and mentors sometimes cant help with harder questions
There wasn't a lot of inspiration for us to make data analytics projects.
The Friday get together probably wasn't necessary, could have done that stuff early Saturday morning
The theme was not satisfying. If there were resources provided, it may have helped us focus more on the idea rather than looking for datasets for the whole day.
Time and seating was unorganized.
How business-heavy it was. I understand the concept was data, but on the technical side i felt the top 5, 4, and 3rd place boiled down to who had a better chart. One group only had a snippet of code in PowerPoint.
There were enough meeting rooms and meeting rooms didn't have a big enough whiteboard for us to brainstorm and discuss new ideas.
We tried to analyze the mining data but due to the size of files this slowed us down and we abandoned it after investing a lot of time.
I wish we could pick at least one person from our team, so maybe a partial choice team selection of some sort. True, the 'new team' experience was awesome, but you are a bit too much at the mercy of luck.
I would have loved to see more than 5 teams in the final stage of judging. Just as a spectator getting to see what other people created is really cool.
I wish I could have gotten a business student on my team, but I know that there probably weren't enough of them so it's not the fault of the organizers.
Couldn't sleep!
Having so many different options for challenges to tackle. I felt like it would be difficult to fairly evaluate all the projects since the Tech Resources case felt like more of a consulting project compared to the rest of the challenges where you had to come up with a whole business/company plan for the new product you created. A final judge did ask a question that was pretty out of scope of the product we delievered.
The presentation of the product -finished or not- is all seemed to matter. I would've also liked comments from judges on how to improve alongside their scores
I lost a weekend and am not behind in my classes.

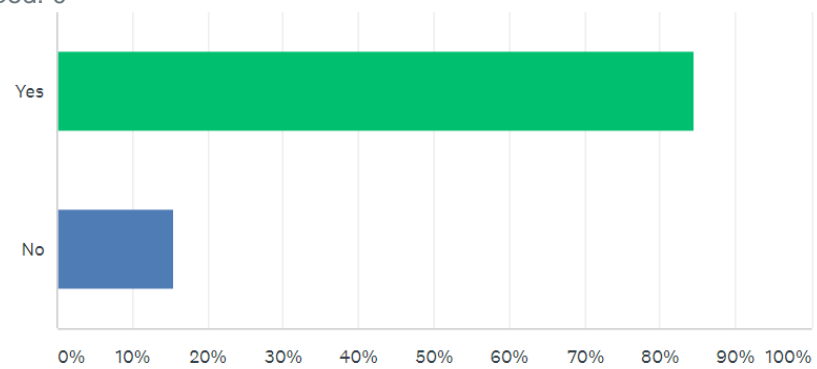## Were the prizes an incentive for you to apply for the hackathon?
Answered: 26, Skipped: 0
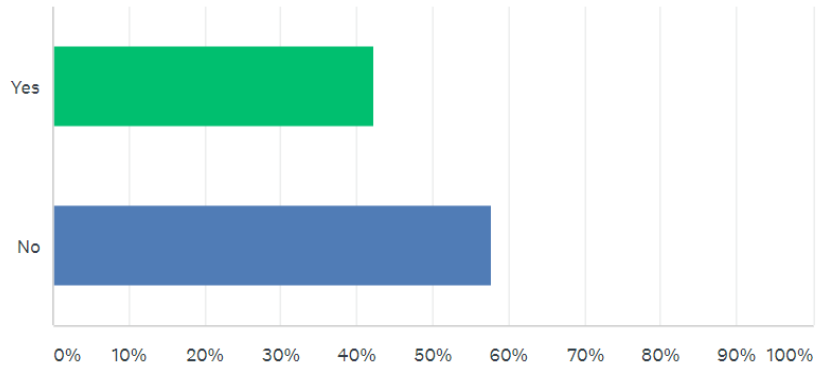
ANSWER CHOICES	RESPONSES	
▼ Yes	42.31%	11
▼ No	57.69%	15
TOTAL		26

Do you feel like the event will help you to get a job in your field?
Answered: 26, Skipped: 0

ANSWER CHOICES	RESPONSES	
▼ Yes	84.62%	22
▼ No	15.38%	4
TOTAL		26

What month would you prefer to have a hackathon?
Answered: 25, Skipped: 1

ANSWER CHOICES		RESPONSES	
▼ January		48.00%	12
▼ February		0.00%	0
▼ March		8.00%	2
▼ April		0.00%	0
▼ May		8.00%	2
▼ June		4.00%	1
▼ July		0.00%	0
▼ August		4.00%	1
▼ September		24.00%	6
▼ October		4.00%	1
▼ November		0.00%	0
▼ December		0.00%	0
TOTAL			25

Did someone reach out to you about connecting outside of the event in a professional manner?

Answered: 26, Skipped: 0
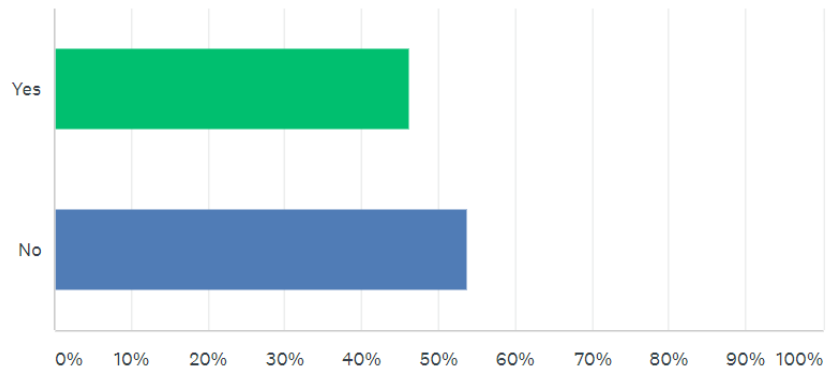
ANSWER CHOICES		RESPONSES	
▼ Yes		46.15%	12
▼ No		53.85%	14
TOTAL			26

If you were to participate in this hackathon again, would you prefer to have us continue to offer balanced pre-made teams, or would you prefer to have free for all registrations where you can come as a solo or a pre-made team?
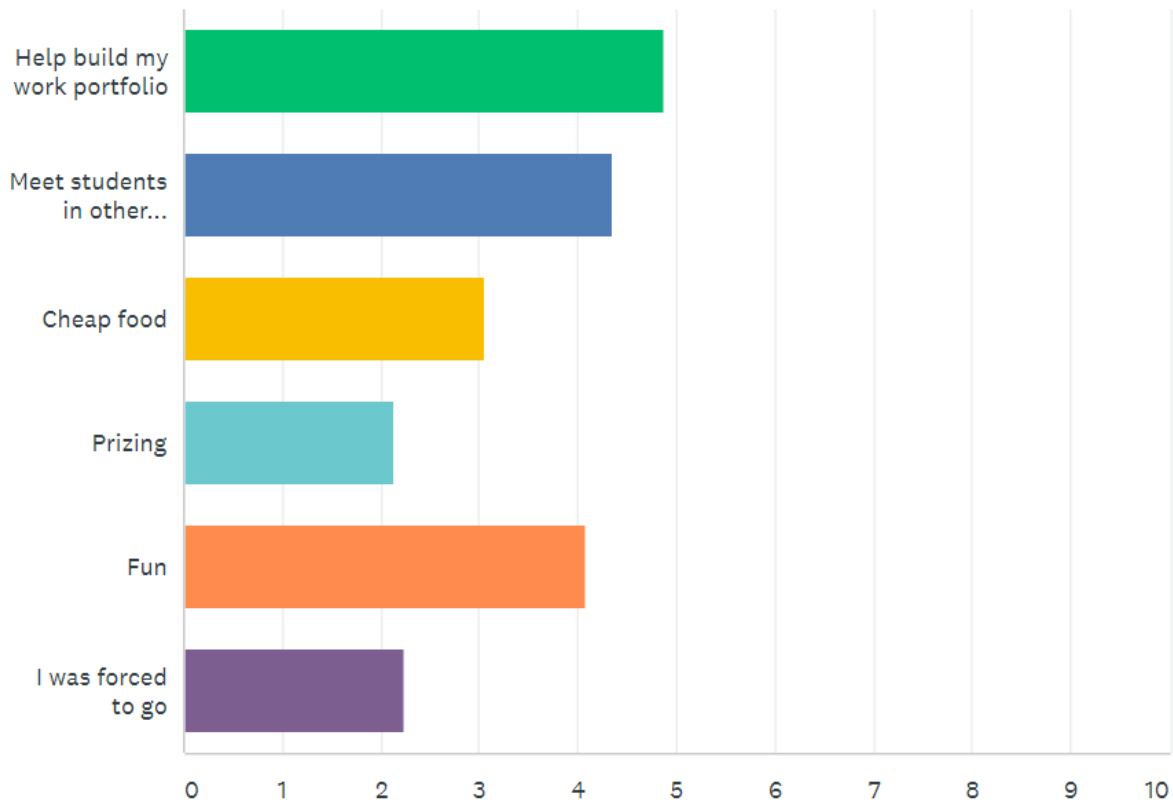Answered: 26, Skipped: 0
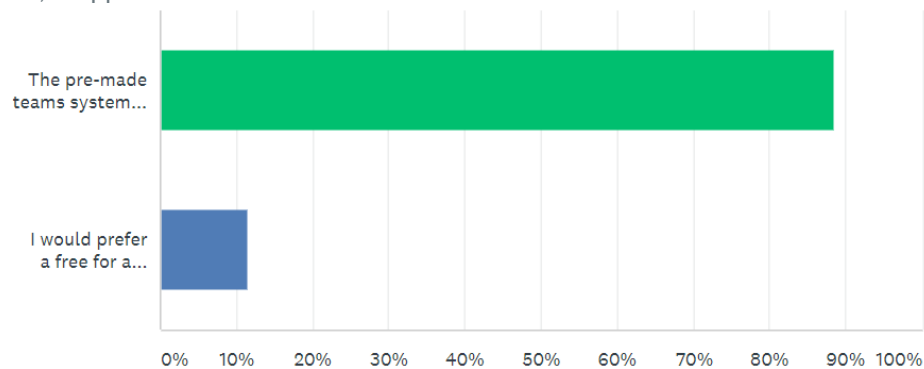
ANSWER CHOICES	RESPONSES	
▼ The pre-made teams system worked	88.46%	23
▼ I would prefer a free for all registration	11.54%	3
TOTAL		26

Why did you participate in the hackathon?
Answered: 26, Skipped: 0

	1	2	3	4	5	6	TOTAL	SCORE
▼ Help build my work portfolio	48.00% 12	24.00% 6	16.00% 4	0.00% 0	4.00% 1	8.00% 2	25	4.88
▼ Meet students in other disciplines	28.00% 7	20.00% 5	20.00% 5	24.00% 6	8.00% 2	0.00% 0	25	4.36
▼ Cheap food	4.76% 1	0.00% 0	28.57% 6	38.10% 8	19.05% 4	9.52% 2	21	3.05
▼ Prizing	0.00% 0	0.00% 0	9.09% 2	13.64% 3	59.09% 13	18.18% 4	22	2.14
▼ Fun	12.00% 3	36.00% 9	20.00% 5	16.00% 4	12.00% 3	4.00% 1	25	4.08
▼ I was forced to go	9.52% 2	9.52% 2	9.52% 2	4.76% 1	0.00% 0	66.67% 14	21	2.24

Should the Student Association continue to run hackathons?

Answered: 26, Skipped: 0
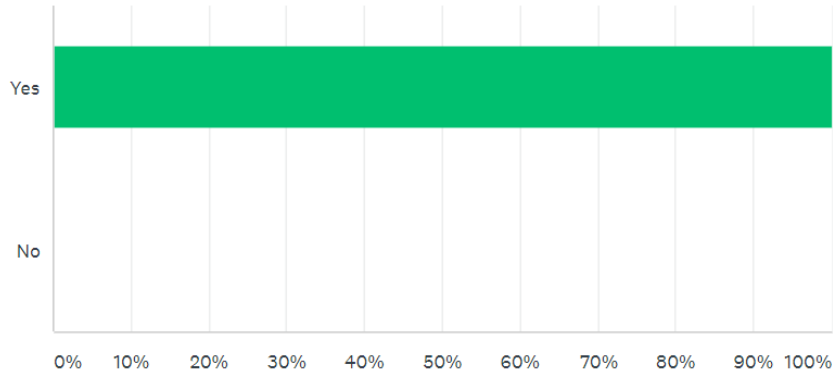
ANNSWER CHOICES	RESPONSES	
▼ Yes	100.00%	26
▼ No	0.00%	0
TOTAL		26

If this event were to be run again, what would you change?

Answered: 17, Skipped: 9

Get mentors with more experience Announce the topics on the first day rather the next date, studies show that sleeping on a problem provides better solutions for the next date.
I would like to have optional workshops/speakers that focused on the topic or a technology that's related. If there's a data analytics hackathon, it would be nice to know some problems in the world that's related to data. It'd also be nice if there's a 1h course on Python Pandas/Data Analytics etc... Just something to inspire the event.
No Friday night event
Nothing, everything was great
Time allocated to opening and closing. Make sure there's less waiting. Have a formalized networking session. Include SAP representatives!!!!!
Less focus on business. I had a lot of fun and I am very proud of the project my team made, but I can't help but be disappointed that you would place better if you had a good PowerPoint and presentation. Also maybe have cheaper UX tickets since there was a definite lack of design students
I would add some games or fun events in the evening or morning during the hackathon. It would be better to have more mentors or volunteers to help out.
Make the theme more relevant. The theme of Big Data was misleading as we were trying to analyze big data.
It'd be nice if we could have more mentors available.
Make the theme more relevant. The theme of Big Data was misleading as we were trying to analyze big data.
Just the team structure, a bit of choice, a bit of random. I really liked balanced teams, and UI people might not know Computing students that might not know Business students, so some sort of pairing would be awesome. This might sound overkill, but allowing those who want, to make a simple survey of their expectations for the hackathon, their experience and so on, to cross reference and match team members fairly according to their answers.

Besides the hackathon, is there anything else you'd like to see from your BCIT Student Association that we are not currently doing, or is there anything that we're currently doing but not doing well?

Answered: 13, Skipped: 13

Announce events more often maybe send emails of month break down
It's kinda hard to find information on all the BCIT websites. There's the BCIT commons, the bcit.com, the bcitsa.ca,.. I just tried searching for the upcoming Tech Industry event and I couldn't find it in the bcitsa page (I used the search function) until I click on the Career Services.
More hackathons!
I like SA a lot, good job! The event was a great experience!
Invite teach relative industry professionals from some big companies to the campus and share their experience or knowledge. In addition, it would be great to have more clubs or BCITSA to organize different tours to some big companies in BC or other province or even in the US. Also, it will be great to have open co-op or internship programs for students to participate.
One thing that would be tremendously helpful is if BCITSA can help students who did not get into coop to get a internship jobs. Ask the students that are interested in doing so and continuously help them network and find a job.
can't think of any, but I think more events like this where students in different disciplines work together on a project would definitely be helpful for us.
I love events, specially those that connect to industry, help portfolio or gain experience. This one was all 3. Thank you so much :)
I think you guys are doing great, but don't let that stop you from doing better.
nothing I can think of right now
nothing comes to mind, thank you for all the effort to organize this event
The hackathon was a good event that I hope will continue into the future. I look forward to seeing what you come up with next but I don't have any specific requests at the moment.

Recommendations

1. The BCIT Student Association continue to run hackathons
2. A singular staff member oversee the event from head to toe, and have the full support of MARCOM and Student Services, this person ideally is tightly connected with the school of computing, and knows the industry well
3. Hackathons should continue to run in the first week of January classes
4. Teams should be allowed to self-form or have an option to sign-up as an individual and find team members on the day of (nwHacks model) – organizers should not manage teams at all
5. A stronger emphasis on industry and technological coaches could be on hand (ie getting Google, Amazon, or Microsoft involved and having them give student credits for cloud computing products like visual recognition)
6. Tickets should be free for students
7. Laptop stickers should be generated and given out or sold at the event
8. Event T-Shirts should be made to help build promotion
9. Post-event marketing should be added to the event
10. Any staff member designated to work on/lead a hackathon be made to go to a hackathon as an attendee

Resources

Photos: https://lnkd.in/g_e4pYn