### Email #1

**Wasek Habib** <wasek.edu@gmail.com>Sat, Sep 22, 2018 at 8:35 AM

To: reza.afzali@fremtidmedia.com

Cc: imrovert@gmail.com, inioladosu@gmail.com, kyrenzie@gmail.com, mattdeleeuw@hotmail.com

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| --- |
| Hi Reza,  My name is Wasek and my team will be working on the bus advisory capstone project. I am a final year computer science major and data science minor focusing on product management as that is something I would like to do after graduation. I just came back from a co-op in IBM and had the pleasure to work with some other fortune 500 and government funded organizations.  Now please allow me to introduce my awesome teammates, who are also excited to work on the project!  Kyle - "25 Year old 4th year Computer Science student. I enjoy hiking, rugby, and video games in my spare time. I plan to find a career in the medical field after I graduate."  Ini - "21 Year old 4th year Computer Science student. I enjoy making music & videos/films and playing video games with my free time. I’m planning on working in the entertainment/tech industry after i graduate."  Matthew - "22. 4th year computer science and math major, i enjoy tootingmy own horn (trumpet joke) gaming, have worked as a professional chef, planning on either going into the gaming industry, teaching, or going into law."  Trevor - "22 year old Computer Science student. I enjoy playing videogames and board games in my free time. I plan on working in mobile development after graduation."  Please let us know when is a good time to have a meeting with you. We figured out that Monday after 5pm works best for us. But if that does not work out for you I am attaching our combined schedule for your convenience and hoping we will be able to sort out a weekly/bi-weekly meeting time that would work for all of us. :)  Talk to you soon,  Wasek |

### Email #2

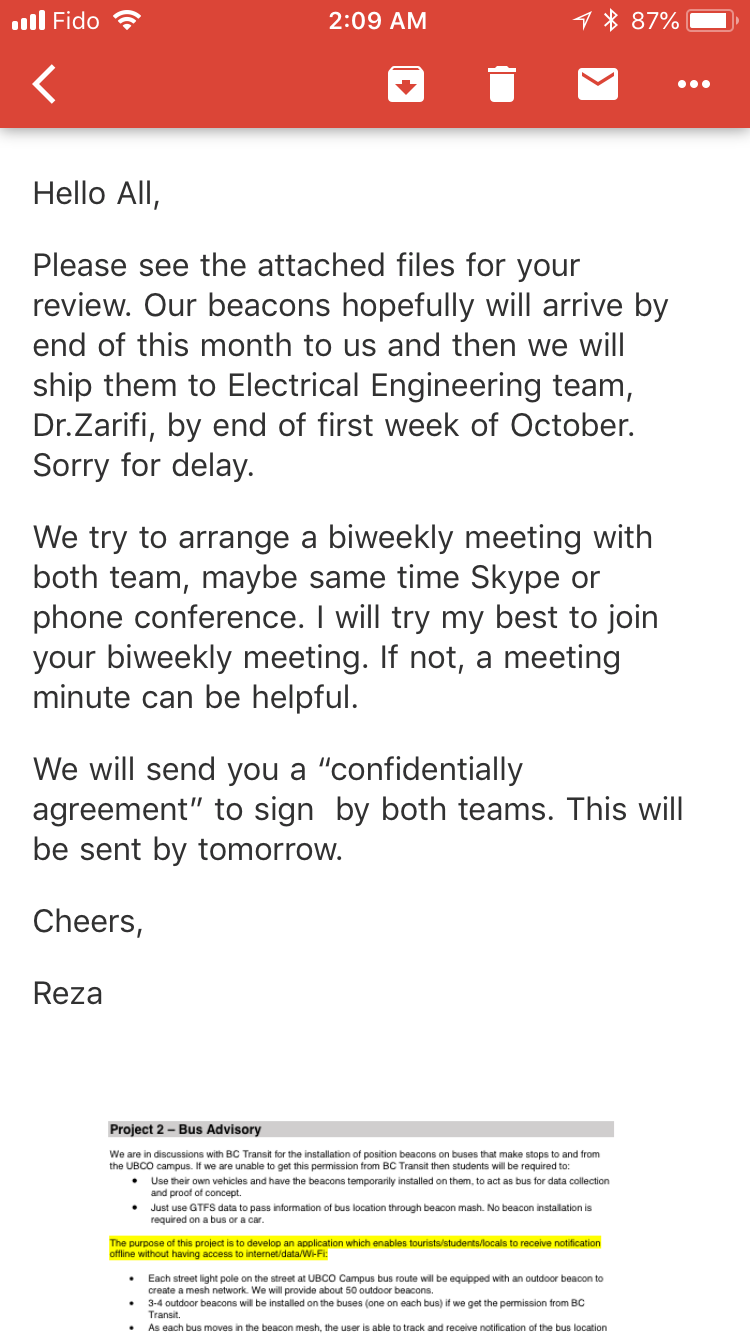
**abbasali kermali** <abbasalikermali123@hotmail.com>Sat, Sep 22, 2018 at 10:07 AM

To: "imrovert@gmail.com" <imrovert@gmail.com>, "inioladosu@gmail.com" <inioladosu@gmail.com>, "kyrenzie@gmail.com" <kyrenzie@gmail.com>, "mattdeleeuw@hotmail.com" <mattdeleeuw@hotmail.com>

Cc: "kyle\_thomas23@hotmail.com" <kyle\_thomas23@hotmail.com>, "‎moustafa.elnaggar.1996@gmail.com" <moustafa.elnaggar.1996@gmail.com>, "‎garrywang108@gmail.com" <garrywang108@gmail.com>, "jason.wang.ee@gmail.com" <jason.wang.ee@gmail.com>

|  |
| --- |
| Hello All,    I received your contacts from Reza at Fremtid, we are looking forward to working together on this project. Our group has 5 members;     1. **Abbas Kermali** (Myself) specialising in Elec., 2. **Moustafa Elnagger** specialising in Elec., 3. **Garry Wang**- specialising in Mech. , 4. **Kyle Thomas**- specialising in Civil, and 5. **Jason Wang-** specialising in Elec.     I suggest we meet **bi- weekly**, in this way we can update each other on the current progress of our team and plan ahead on what to tackle next. Reza also forwarded me your timetable, and I managed to find a time that works best for all of us given that one of our team member is enrolled in 7 courses, that is on **Friday’s 10.30 AM to 11.30 AM.**  If you are all okay with this then we can meet this coming **Friday on September 28** to fill each other in on more information.    Kind regards,  Abbas |

### Email #3



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### Email #4

**Kyle R** <kyrenzie@gmail.com>Mon, Sep 24, 2018 at 10:34 AM

To: reza.afzali@fremtidmedia.com

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| --- |
| Hello Reza,  This is Kyle Rennie from the Computer Science group of the bus advisory project. I will be your point of contact with the team. Last week I was unable to so Wasek helped me out. I was wondering if you could provide your skype information for our meeting tonight.  Thanks,  Kyle |

**Reza Afzali** <reza.afzali@fremtidmedia.com>Mon, Sep 24, 2018 at 10:53 AM

To: Kyle R <kyrenzie@gmail.com>

Hi Kyle,

It is nice to meet you. Looking forward to talking with you.

"afzalivancouver" is my Skype.

Best Regards,

**Reza Afzali**

*Director of Digital Operations & Strategy*

***Fremtid Media Inc.***

Cell: 778-858-0710

Email: reza.afzali@fremtidmedia.com

### Email #5

|  |
| --- |
| Hey Reza,  Scott has asked us to get some information for some forms we have to use in class the information he asked for is:  -Legal Company Name  -Company Mailing Address including City and Postal Code  -Company Contact Person  -E-mail address  -Tel. No.  I believe I have all of this information other than the mailing address. Could you provide me with that please?  Thanks,  Kyle. |

**Reza Afzali** <reza.afzali@fremtidmedia.com>Mon, Sep 24, 2018 at 6:45 PM

To: Kyle R <kyrenzie@gmail.com>

Hi Kyle,

See below.

**From:** Kyle R <kyrenzie@gmail.com>

**Date:** Monday, September 24, 2018 at 6:40 PM

**To:** <reza.afzali@fremtidmedia.com>

**Subject:** Contact information

Hey Reza,

Scott has asked us to get some information for some forms we have to use in class the information he asked for is:

-Legal Company Name Fremtid Media Inc.

-Company Mailing Address including City and Postal Code : [6124 184 St, Surrey, BC V3S 9E6](https://maps.google.com/?q=6124+184+St,+Surrey,+BC+V3S+9E6&entry=gmail&source=g)

-Company Contact Person Reza Afzali

-E-mail address : reza.afzali@fremtidmedia.com

-Tel. No. : 778-858-0710

I believe I have all of this information other than the mailing address. Could you provide me with that please?

Thanks,

Kyle

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| Email #6 ---------- Forwarded message ---------  From: **REZA AFZALI** <reza.afzali@fremtidmedia.com>  Date: Fri, Sep 28, 2018 at 2:35 PM  Subject: Re: Query on Requirements  To: Wasek Habib <wasek.edu@gmail.com>  Cc: abbasali kermali <abbasalikermali123@hotmail.com>, Simranpal Bains <sp.bains@fremtidmedia.com>  Hi Wasek, and Abbas.  You will have access to the beacons hopefully before October 6 or 13th. We try to deliver them by weekend.  You will have access to the beacons SDK and API by October 6th. Yes, they are paid services and you will get support through their tech support, usually in 24 hours. Only, by email.  The model for your group is below. You will receive 30 beacons.  <https://store.kontakt.io/next-generation/44-bluetooth-beacon-hd18-3.html>  You will have access to one/two gateway.  <https://store.kontakt.io/next-generation/33-gateway.html>  The gateways might be shared to collect data with other capstone group, the wayfinding. We need to install one at EME and one somewhere near EME for bus stops to collect data.  Watch the Youtube Channel:  <https://www.youtube.com/channel/UCQfhjPv8K72gn3l3VQeDXUw>  Offline features:  1. Beacon/bus tracking : Try to show the live location of the bus same as Uber App that show the live location of the car.  2. Push notifications (could be online/offline both)  We are discussing with Engineering team to provide accessibility for visually impaired, wheelchair, and stroller:   * To provide an audio device to provide voice notification to visually impaired people. The audio device will communicate with beacons. They may need help to set it up from your team. * Read the attached PDF file. Read the page 27. There is an issue with visually impaired people when multiple buses arrive at the bus stops: The bus driver needs to know if there is visually impaired person waiting at the bus stop. This can be solved with small light signal at front of bus driver to inform the bus driver about the visually impaired or wheelchair or stroller.   whealchair  On Sep 27, 2018, at 9:11 PM, Wasek Habib <wasek.edu@gmail.com> wrote:  Hi Reza,  As we are about to start analyzing the requirements and create project charter, I wanted to clarify some stuff-  1. Which Kontakt beacon model we will be using?  2. Do we get any support email/service from them as paid customers?  Offline features:  1. Beacon/bus tracking  2. Push notifications (could be online/offline both)  Online features:  1. Nearby bus schedule will be online as the map APIs require internet  2. Navigation (I.e. routing from point A to point B) will be online for the same reason  Please have a look at the enquiries when you get a chance- no rush :)  Cheers,  Wasek |

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| #7 From: **Reza Afzali** <reza.afzali@fremtidmedia.com>  Date: Tue, Oct 2, 2018 at 11:16 AM  Subject: Re: Resume profile  To: Wasek Habib <wasek.edu@gmail.com>  Cc: <kyle\_thomas23@hotmail.com>  I don't need the whole resume but a brief summary of your education and summary of your work experience if you have. No need for full profile. I need it this for everyone. Thanks  Best Regards,  **Reza Afzali**  ***Fremtid Media Inc.***  Cell: 778-858-0710  Email: reza.afzali@fremtidmedia.com  On Oct 2, 2018, at 11:06 AM, Wasek Habib <wasek.edu@gmail.com> wrote:  Hi Reza,  Is it just my resume or the whole team’s?  On Tue, Oct 2, 2018 at 10:36 AM Reza Afzali <reza.afzali@fremtidmedia.com> wrote:  Hi All,  I need a brief summary of your education and work experience if you have, for our proposal to submit to BC Tranist. They want to review a proposal in order to join this project. This means this is not 100% yet if BC Tranist want to join us and let us to use their buses. They have multiple layer of approval. Please send me by end of today.  Best Regards,  **Reza Afzali**  ***Fremtid Media Inc.***  Cell: 778-858-0710  Email: [reza.afzali@fremtidmedia.com](mailto:reza.afzali@fremtidmedia.com) #8 From: **Reza Afzali** <reza.afzali@fremtidmedia.com>  Date: Tue, Oct 2, 2018 at 10:33 AM  Subject: Re: Schedule A- Agrement  To: Angie Pinchbeck <angie.pinchbeck@gmail.com>  Cc: <wasek.edu@gmail.com>, Nick Gerritsen <nicholas.gerritsen@hotmail.com>, <abbasalikermali123@hotmail.com>  Hi All,  The whole group can sign one document and send it to us. Same for ip master agreement, make sure it is 2018 version document. The one I sent you is old one. For both documents,make sure, the signed documents have every team member name and signature.  Best Regards,  **Reza Afzali**  ***Fremtid Media Inc.***  Cell: 778-858-0710  Email: reza.afzali@fremtidmedia.com  On Oct 2, 2018, at 10:24 AM, Angie Pinchbeck <angie.pinchbeck@gmail.com> wrote:  Hi Reza,  Just to clarify, each person needs to do a separate Schedule A-UBC, but we only need to give you one IPmaster2, signed by the whole group?  Cheers,  Angie  On Mon, 1 Oct 2018 at 19:42, REZA AFZALI <reza.afzali@fremtidmedia.com> wrote:  Hello All,  Please review the attached PDF, sign and send it back to me before Friday. This document has to be reviewed by all of your team members and signed.  Please provide me a copy of your UBC Master Agreement before Friday. If you have any questions, please advise. #9 **Kyle R** <kyrenzie@gmail.com>Tue, Oct 2, 2018 at 6:28 PM  To: reza.afzali@fremtidmedia.com   |  | | --- | | Hi Reza,  It's Kyle and I think there has been a slight mix up, which is our fault. I'm supposed to be the groups contact with you, so if you have any questions for the team please send them to me. Only because we have to log all contact and it makes things easier this way. I will contact you with questions from the team, Wasek just did it because I was busy the first week with another class and he had time available. With that out of the way here is our teams information you asked for.  Matthew De Leeuw  I am a 4th year student doing a double major in math and computer science. I am mostly interested in game development and back end software development. I have experience in Alexa applications.  Trevor Gallicano  4th year computer science student. I have in interest in board games and video games.  Ini Oladosu  Final Year Computer Science Major. I'm interested in mobile & web development and have made a few websites  Wasek Habib  Final year computer science major and data science minor focusing on Product Management. Worked as Freelance Consultant, Big Data Analytics Web Application Developer at IBM, and Junior Developer at WestGrid/Compute Canada).  Kyle Rennie  I'm a 4th year computer science student. I have an interest in medical technology and video games. I plan to peruse a career in one of these fields after I have some more work experience. |   **REZA AFZALI** <reza.afzali@fremtidmedia.com>Tue, Oct 2, 2018 at 6:34 PM  To: Kyle R <kyrenzie@gmail.com>  Hi Kyle,  Thanks for information and clarification.  Thanks, |

### #10

**Meeting**

8 messages

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| **Kyle R** <kyrenzie@gmail.com> | Thu, Oct 4, 2018 at 3:03 PM |
| To: reza.afzali@fremtidmedia.com | |
| |  | | --- | | Hi Reza,  Would you be available for a Skype meeting tomorrow between 10:30 and 11:30. The team has a few more questions they would like to ask.  Thanks,  Kyle | | |

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| **Reza Afzali** <reza.afzali@fremtidmedia.com> | Thu, Oct 4, 2018 at 4:59 PM |
| To: Kyle R <kyrenzie@gmail.com> | |
| |  | | --- | | Hi Kyle, we can have phone call. I am out of office tomorrow for all day. Please list your questions before the meeting. Thanks.  Best Regards,  **Reza Afzali**  ***Fremtid Media Inc.***  Cell: 778-858-0710  Email: reza.afzali@fremtidmedia.com  [Quoted text hidden] | | |

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| **Kyle R** <kyrenzie@gmail.com> | Thu, Oct 4, 2018 at 6:45 PM |
| To: reza.afzali@fremtidmedia.com | |
| |  | | --- | | We are going to make a google doc with all our questions and I'll send it to you. We don't need to have a phone call. You can answer them when you have time.  Thanks,  Kyle  [Quoted text hidden] | | |

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| **Reza Afzali** <reza.afzali@fremtidmedia.com> | Thu, Oct 4, 2018 at 7:04 PM |
| To: Kyle R <kyrenzie@gmail.com> | |
| |  | | --- | | Thanks  Best Regards,  **Reza Afzali**  ***Fremtid Media Inc.***  Cell: 778-858-0710  Email: reza.afzali@fremtidmedia.com  [Quoted text hidden] | | |

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| **REZA AFZALI** <reza.afzali@fremtidmedia.com> | Sat, Oct 6, 2018 at 6:58 AM |
| To: Kyle R <kyrenzie@gmail.com> | |
| |  | | --- | | Hi Kyle, I am going to be in Kelowna around 11 till 4 pm. Please advise if you or Wassib is around to meet and talk. Thanks,  [Quoted text hidden] | | |

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| **Kyle R** <kyrenzie@gmail.com> | Sat, Oct 6, 2018 at 12:06 PM |
| To: REZA AFZALI <reza.afzali@fremtidmedia.com> | |
| |  | | --- | | Hi Reza, I am away visiting family but I will ask wasek.  [Quoted text hidden] | | |

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| **Kyle R** <kyrenzie@gmail.com> | Sat, Oct 6, 2018 at 12:10 PM |
| To: REZA AFZALI <reza.afzali@fremtidmedia.com> | |
| |  | | --- | | Wasek said he's also out of town visiting family, sorry.  Kyle  [Quoted text hidden] | | |

**Reza Afzali** <reza.afzali@fremtidmedia.com>Sat, Oct 6, 2018 at 12:21 PM

To: Kyle R <kyrenzie@gmail.com>

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| --- |
| No worries,  I am here on Tuesday as well to meet a client . If you are around on campus sometime around 1-4, let me know.  Best Regards,  **Reza Afzali**  *Director of Digital Operations & Strategy*  ***Fremtid Media Inc.***  Cell: 778-858-0710  Email: reza.afzali@fremtidmedia.com |

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| #11  |  | | --- | | Hello Reza,  Our group had our weekly meeting with Scott and he was concerned we hadn't nailed down our rigid project requirements and the scope of the project. He suggested we write a high level overview of what we are building and what it does exactly so that there is no ambiguity. Our deadline to have all the requirements and scope in place is next week, so we just want to be very sure before we move on to the next steps. Here is the summary of the project we came up with as a group:  We are creating a mobile application (proof of concept) that will allow all users, including visually impaired users to be notified as a bus is approaching. It will be sending 2 notifications. The 1st one triggers when a user gets in a specific range of a 97 bus-stop beacon, they will be notified of the wait time of the arriving bus. A 2nd notification that alerts the user that the bus has left the stop triggers when the bus leaves the stop, unless the user is on the bus. In the app a map should be displayed showing the live location of 97 bus in beacon range. The app displays a static schedule for 97 and a live expected time for the next arriving 97 bus. The app will also collect and store encrypted user data in the cloud and device both that will contain travel times, distances and if the user is visually impaired. The app will also send a signal to a receiver that a visually impaired user is at the stop.  Scott was also wanted us to to be clear on the things we think will be out of our scope. Some of them he suggested, but most we talked about as a group. They were:  Out of scope:   * Outside of UBCO roundabout and EME bus stop * Mesh network (Both software and hardware) * Other bus lines except 97 * People with strollers or wheelchairs (physically impaired) * Speakers on stops * Hardware * Cost analysis * Wayfinding (Navigation and in-between stops) * Anything that’s in scope of engineering team   None of this is set in stone as things we can and can't do. However, we need very hard requirements by next week and what the boundaries of our work will be.  Thanks!  Kyle |   **Reza Afzali** <reza.afzali@fremtidmedia.com>Wed, Oct 10, 2018 at 6:26 AM  To: Kyle R <[kyrenzie@gmail.com](mailto:kyrenzie@gmail.com)>  We are creating a mobile application (proof of concept) that will allow all users, including visually impaired users to be notified as a bus is approaching.   * Forget about the wheelchair, visually impaired, stroller, etc. Just considered a person . That person has app developed by your team on his phone and approach the bus stop and gets one notification. * The second notification will be send through speaker. The communication between speaker and beacon at the bus stop is done by engineering students, the commutation between the bus stop beacon, phone app and server is done by your team.     It will be sending 2 notifications. The 1st one triggers when a user gets in a specific range of a 97 bus-stop beacon, they will be notified of the wait time of the arriving bus. A 2nd notification that alerts the user that the bus has left the stop triggers when the bus leaves the stop, unless the user is on the bus.   * One notification will be sent to that person when he is in certain range, like 2-5 m of the beacon at the bus stops. * Read above about the second notification. The user will not receive a second notification.   In the app a map should be displayed showing the live location of 97 bus in beacon range.   * Live location is easy. There are many example on Kontakt site that shows you how it is done.   The app displays a static schedule for 97 and a live expected time for the next arriving 97 bus.   * No need for static schedule feature, useless. Just live location and schedule which is done in above steps.   The app will also collect and store encrypted user data in the cloud and device both that will contain travel times, distances and if the user is visually impaired. The app will also send a signal to a receiver that a visually impaired user is at the stop.   * We just need travel time and distance. * No need to care about visually impaired person.   Out of scope:   * Outside of UBCO roundabout and EME bus stop: The bus route distance is about 1.3 km-1.5 km. There is not a real bus stop in between. The start point is UBCO roundabout and EME stops. * Mesh network (Both software and hardware): They will make the mesh network and testing. It is easy. If you are not familiar with the mesh network, then you can NOT do the app either. * Other bus lines except 97: It is one bus if it is approved by BC Transit. If not, then it is just a standard car. * People with strollers or wheelchairs (physically impaired): It will be one person. No impaired person, no wheelchair, no stroller. That person is not identified. * Speakers on stops: The engineering student will do it. The will develop it. The communication between speaker and beacon at the bus stop is done by engineering students, the commutation between the bus stop beacon, phone app and server is done by your team.      * Hardware: The engineering student will develop a light sensor to communicate with beacons. The communication between light sensor and beacon on the bus/car is done by engineering students, the commutation between the bus/car beacon, phone app and server is done by your team. * Cost analysis: The engineering student will do it. * Wayfinding (Navigation and in-between stops): No need. * Anything that’s in scope of engineering team: The engineering student will do it.         If you need to talk, I am free, just send me text.  Thanks, |

### #12

**map**

2 messages

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| **Kyle R** <kyrenzie@gmail.com> | Fri, Oct 12, 2018 at 12:49 PM |
| To: REZA AFZALI <reza.afzali@fremtidmedia.com> | |
| |  | | --- | | Hi Reza,  The team wanted to know if you have any preference for which map we use. We believe there may be some legal problems using google maps.  Thanks,  Kyle | | |

**REZA AFZALI** <reza.afzali@fremtidmedia.com>Sat, Oct 13, 2018 at 10:55 AM

To: Kyle R <kyrenzie@gmail.com>

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| Here maps is fine as per your team recommendation.  <https://wego.here.com/?map=49.23121,-122.98072,16,normal>  Begin forwarded message:  **From:** Kyle R <kyrenzie@gmail.com>  **Subject: map**  **Date:** October 12, 2018 at 12:49:28 PM PDT  **To:** REZA AFZALI <reza.afzali@fremtidmedia.com>  [Quoted text hidden] |

### #13

**REZA AFZALI** <reza.afzali@fremtidmedia.com>Wed, Oct 24, 2018 at 5:29 PM

To: Kyle R <kyrenzie@gmail.com>, abbasali kermali <abbasalikermali@hotmail.com>

Cc: Simranpal Bains <sp.bains@fremtidmedia.com>

|  |
| --- |
| Hello All,  I understand that most of you folks have midterms. Therefore, we like to create an overall schedule for the rest of school year.  For now, please set up an schedule sometimes next week, probably Tuesday. We like to have Skype talk with team leaders or both groups at the same time. This way we can be on the same page.  Thanks, |

### #14

**Kyle R** <kyrenzie@gmail.com>Fri, Oct 26, 2018 at 4:12 PM

To: REZA AFZALI <reza.afzali@fremtidmedia.com>

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| We have a team meeting every Monday at 5 and we were thinking we could have a check in with you at the same time if that would work. |

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| **REZA AFZALI** <reza.afzali@fremtidmedia.com> | Sun, Oct 28, 2018 at 3:49 PM |
| To: Kyle R <kyrenzie@gmail.com>  Cc: abbasali kermali <abbasalikermali@hotmail.com> | |
| |  | | --- | | Hello All,  Tomorrow, I will have a site meeting with a Client in Vernon. I am not sure what time of the day, I will be free.  I can meet both groups in person at the same time, so we don’t have to do the Skype. Please advise if you can provide me with couple of options for a 30 minutes during the day between 10 am till 6 pm.  I am leaving Kelowna by 6 pm.  Thanks  [Quoted text hidden] | | |

**Kyle R** <kyrenzie@gmail.com>Sun, Oct 28, 2018 at 9:30 PM

To: REZA AFZALI <reza.afzali@fremtidmedia.com>

Hi Rez,

I think 5 or 5:30 would be the best time for us. We usually meet at that time.

Thanks

[Quoted text hidden]