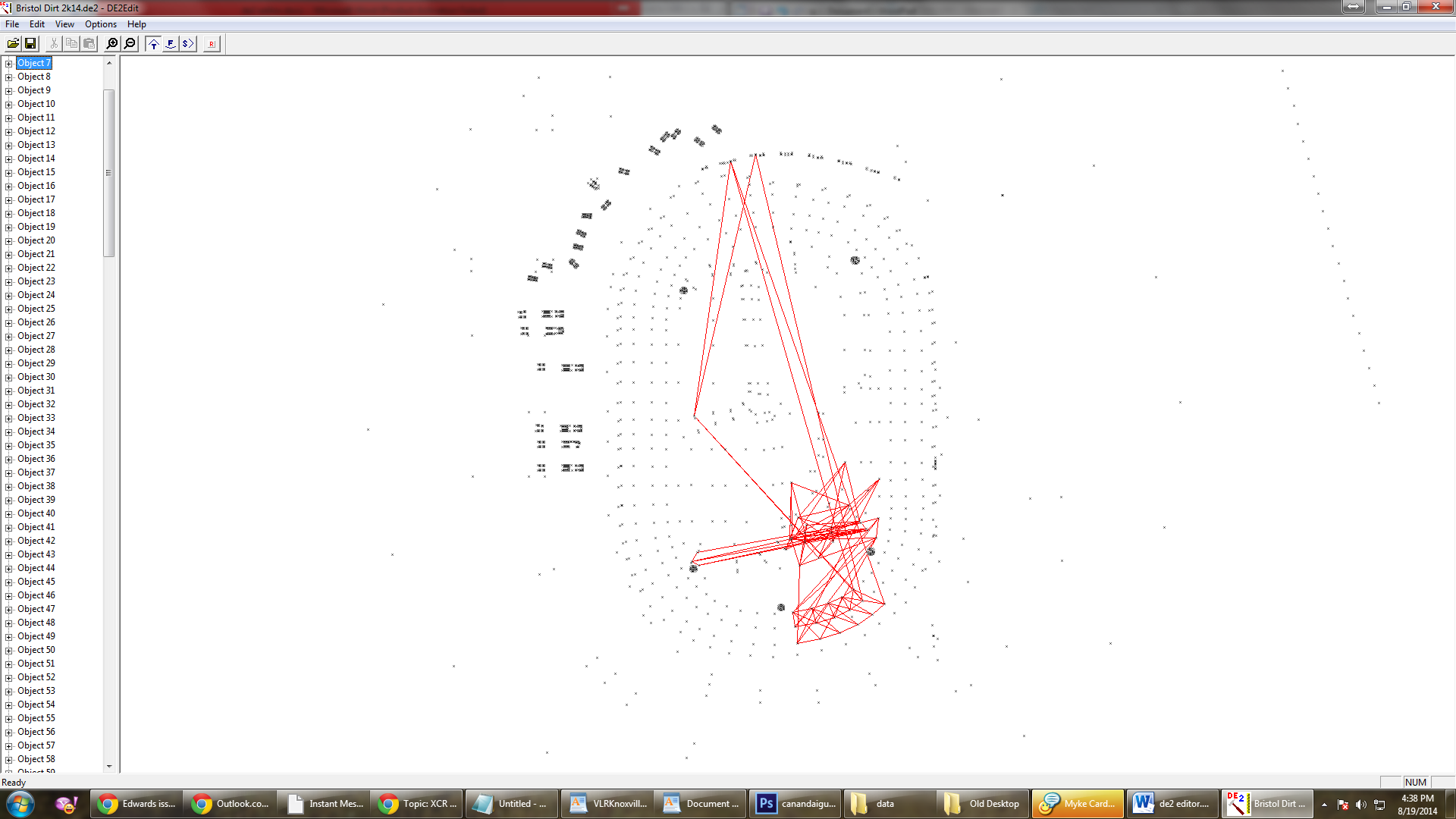
I am answering your questions one by one so hopefully they will help! Thank you!

QUESTION 1: When you add a new object in rhino, how are you specifying the vertices of the polygons of the object to be added?

**Good question, but we don’t add new objects into Rhino because we already know it doesn’t work, most likely for the reason you mentioned with the vertices.**

QUESTION 2: Also can you explain what messed up means? Like I want to know what exactly is happening with the new object? Also could you send me a screenshot of how it is getting messed up?

**Messed up as in when we import the .csv back into the de2 editor after editing the track in Rhino, the track looks normal until you select objects. The points are all linked in wrong places. I will attach screenshot:**



QUESTION 3: Can you give a project statement like what are the exact features I have to implement for the 1200$ we have agreed upon?

**MUST HAVES:**

1. **The ability to IMPORT/EXPORT Object Polygons and also Unique Verts to .CSV like the current de2 editor has**
2. **The ability to export object(s) from one de2 file to .csv and then be able to import those same object(s) into another de2 track file as a new object. For example, if the current track has 14 objects, if I import one object from another track like say a semi-truck, the track should now have 15 objects. And it must show up properly in the game.**
3. **Ability to export Texture Vertices and Texture Location of an object to .csv file, and also be able to import it into another track as well. An example of this would be let’s say I import the semi-truck object I have into the de2 track file I currently have open. Well, I don’t think there will be a texture assigned to it yet. So I would also need an option after I export the .csv file containing the xyz points of the truck that has the ability to export the texture information and import it into the new track along with the semi. Some “objects” have more than one objects on them. Like one object could have 10 semi-trucks in that same object. So I would need to be able to export/import all 10 textures and texture vertices at once. Shouldn’t be too hard since they’re all the same “object”, just with more than one texture total.**
4. **Ability to rename textures. Like if Polygon 12 in an object is a light pole and is named light\_pole1.tex, can rename it to something else so that it links to a different texture.**
5. **A credits section or something under a tab called “About” or something, with a list of names who helped donate to this project (I will give names before release when we are done taking donations).**

**WOULD LIKE TO HAVE, BUT NOT NECESSARY IF BUDGET WON’T ALLOW. IF YOU DON’T CARE AND IT’S NOT MUCH TROUBLE AFTER GETTING THE REST DONE, IT’D BE GREAT IF YOU COULD:**

1. **Ability to remove the shadows that are cast in parts of the .de2 file in places. This one isn’t as important because I’m not sure if it’s possible. The shadow removal could take place by right clicking an object number and clicking an option called “remove shadows” or something of that nature.**
2. **Ability to create new de2 files and objects from scratch, or import entire track models from other games if converted to polygon format. This would be awesome!!**
3. **Ability to delete objects and/or polygons without it messing the track file up similar to the example screenshot from above.**

QUESTION 4: So rhino only helps you to move around the objects that are already present in the track?

**Yep, in Rhino we just move around what’s already there so it doesn’t mess the de2 editor up like in the screenshot earlier. With the new program and being able to import new objects, we can then import them into the new de2 editor and just export the whole track out to a .csv file and then move those objects around in Rhino.**

**QUESTION 5: Also I wanted to know, When you are adding a new object to the track, what is the manual procedure you are going through to add the object( how are you specifying the 3D vertices of the different polygons that form the object? ) currently? Or are you doing it in a different way without specifying the cordinates?**

**Right now, we have no way at all to add new objects. That’s actually the main reason for wanting this program made. It’s so that we can add new objects instead of just being able to move existing ones around. Basically, in the current de2 file, If there are 100 objects, there is no way to make 101 or even delete any. You can delete and add in the CSV but then it becomes jumbled like the screenshot I sent. If that’s what you mean, that’s the only way we’ve ever tried to add or remove anything to realize that it doesn’t work…**

**If you’re asking how we would like to be able to add a new object, I guess whatever way is the best or easiest and still does the job needed. I figured if the layout was somewhat similar to the current de2 editor that I attached to the project, we could right click on the left pane and click an option that says new object or something. Or maybe under “File>New Object” and then select New Object from .csv file or something like that and then import the .csv and add it as a new object. Then maybe can right click the object or the polygons for that object and have an option to “Import Textures from .csv file” and then import textures that we exported from another .de2 file. It would be nice if we could select multiple polygons at once to assign a single texture to all of them instead of selecting each one by one! ☺ Hopefully that makes sense.**

QUESTION 6: Also the details of the object to be added has to be read from a csv right(in the editor I build)?

**Yes, preferably. Just since that’s what the current editor outputs and is easy for us and probably easiest for you. The .csv contains the polygon data. It would be cool if we could import entire tracks from other games, though…but I’m not sure how plausible that is. If you have other ideas you can let me know.**

QUESTION 7: Assume I have two tracks A(has 5 objects) and B(has 10 objects), if I open trackA in de2editor and then import the trackB(after modifying trackB in rhino and then converting it back to raw and csv), will trackA still have 5 objects or 10?(Because trackB has 10 objects and I imported it to trackA)?

**Good question. I’ve tried this, and despite trackB having more objects, when you import it into the current DE2 editor replacing trackA, it will still only show 5 objects. The only difference is that the track will look normal like in the screenshot earlier, but when you select the objects they will be all scrambled up like in the screenshot.**

QUESTION 8: Also can you send me csv files(one normal and one edited with rhino and has more number of objects than trackA) of two different tracks so that I can try it out and see what import exactly does?

**I sent you two different DE2 files that were included in the .zip file I posted on getacoder. PRP 2013 and I think OCFS 2k12. They have different number of objects. One has 79 and the other 82, so it seems like you could try this with yourself. Import just imports the .csv file you exported out from the de2 editor. Try going to file>export>Object Polygons (uncheck for selected objects only) on one of the tracks. Then go to File>Import>Object Polygons (uncheck selected objects only) and see the result.**

NOTE #1: So basically I will provide you an option(by writing a script) to import one or many objects to the de2editor( .de2 format, assuming there are 5 objects already present, if you click on import, it shows option to select the csv file once, it will become 6), later you can export it and open with rhino3d, make changes, get in back to jar and the back to csv.

**Sounds good to me! So we could import several objects at once? This would be dumb, but are you saying we could export a whole track to .csv and then import the entire track over top of another and it would just add to the number of objects?? And then we could export all the textures and import them over the old tracks objects? That would be amazing! I’m thinking we might be able to make new tracks and import them from other games using this.**

QUESTION 9:

Also looking at the values in the csv which are like this

1 1 121 -38.81419 40.814247 1185.03833 123 -38.81419 40.814236 1215.310303 118 -38.81419 51.455479 1200.174561

1st column denotes object number, 2nd polygon number, 4, 5, 6 the vertex of first edge of polygon, 8,9,10 the 2nd vertex, 12, 13, 14 the 3rd vertex. What do columns 3, 7 and 11 denote?

**I think this is where it gets tricky ☹. These appear to be unique vertex ID’s (hopefully that is right). Which would imply that some polygons or vertexes are linked together despite being in different objects. Hopefully this isn’t a big deal, but it may be. Like how Object Number goes down in order, but those numbers can go from like 121 to 1482 or something and still be on the same object, and then go back to 122 or something like that. Hopefully that makes sense…An easy way to compare is to export one of the de2 files Object Polygons out, and then export it’s Unique Verts. When that happens you can scroll around and see that if the columns, 3, 7, and 11 are 121, 123, and 118, you can look at those numbers on the unique verts exported CSV and see that the X, Y, Z points all match up.**

QUESTION 10: What happens to the xyz coordinates? Will they get replaced with those of the ones I'm importing or does it happen in a different way?

I’m not exactly sure what you mean. If you’re talking about what happens to the original X,Y,Z coordinates in the .csv file after we move the objects around in Rhino, it’s pretty simple. When we save the raw file from Rhino we just run a Macro in Excel that converts it back into a format that easily allows us to copy and paste over the original XYZ coordinates. When we convert it with the macro, it spits it into 9 columns, X,Y,Z, X,Y,Z, X,Y,Z, and we paste them into columns DEF, HIJ, and LMN (If I remember) right in the original CSV and it just overwrites those. If that’s not what you mean please let me know.

I'm signing off for the night. Kindly try giving as detailed explanation as possible to my questions. I will check you meassages and start as soon as possible tomorrow. Thank you.

Not a problem!!!! Hopefully all that helps, it’ll probably take half the day to read :P, but if it gives you what you need to know I’ll be happy. If you have any further questions about please don’t hesitate to let me know! Thanks and I hope you slept great! Keep me updated on progress and any questions you may have.