**Human-Centered Design – Challenge**

**To Infinity and Beyond Team**

We have implemented open-source OCR tool and Yandex translator in Python language to get better understanding of their outputs and identify the success and failing scenarios for future development. Later, we will work on the interface part and assemble all in android app / executable software to distribute and collect feedback from the pilot users.

Here are some initial results (without any edits) from our implementation evaluated at different content/real-life scenarios. Note the typos resulted in OCR / translator, hence we will give the users the ability to engage and correct them for the current pilot version.

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| Study Case | Captured Image | OCR Output | Translator Output |
| Restaurant Receipt | C:\Dropbox\SSSR\Tech Projects\MIT Projects 2017\NeuralMachineTranslation\Challenge2\OCR\bill.jpeg | KUNG  Kung Fu Tea WaIW Street  9 Broadway, New York, NV 10004  TEL: 212-785-5688  Urderﬁ 2687389  CaH Humbert: 65  Station” P051  To Go Order  Date 7/21/15,  Pineapple 8]  Large-4.75  uhtntal:  Tota] Tax:  Customer Pa1d Cash:  Customer Change:  V1sit us at KFTEAUSA.CDM  HAVE A NICE DAY~ | الكونغ  الكونغ فو الشاي WaIW الشارع  9 Broadway, نيويورك, NV 10004  رقم الهاتف: 212-785-5688  Urderfi 2687389  CaH همبرت: 65  محطة" P051  الذهاب النظام  تاريخ 7/21/15,  الأناناس 8]  كبيرة-4.75  uhtntal:  توتا] الضريبية:  العملاء Pa1d النقدية:  عملاء التغيير:  V1sit لنا في KFTEAUSA.آلية التنمية النظيفة  وقد لطيفة اليوم~ |
| Traffic Sign | C:\Dropbox\SSSR\Tech Projects\MIT Projects 2017\NeuralMachineTranslation\Challenge2\OCR\Traffic signal.jpg | NEW  TRAFFIC  SIGNALS  AHEAD | جديد  المرور  إشارات  قبل |
| Paragraph Script | C:\Dropbox\SSSR\Tech Projects\MIT Projects 2017\NeuralMachineTranslation\Challenge2\OCR\Paragrph.png | You can create local variables for the pipelines within the template by  preﬁxing the variable name with a “$” sign. Variable names have to be  composed of alphanumeric characters and the underscore. In the example  below I have used a few variations that work for variable names. | يمكنك إنشاء المتغيرات المحلية على خطوط الأنابيب داخل القالب عن طريق  يسبق اسم المتغير مع "$" علامة. أسماء المتغيرات يجب أن تكون  تتألف من أحرف أبجدية رقمية و تسطير أسفل السطر. في المثال  أدناه لقد استخدمت بعض الاختلافات التي تعمل على أسماء المتغيرات. |

Further samples of book pages as captured by our smartphone camera and processed by code can be seen in the attached files along with this submission.