**COGENT DATA WORKSHOP**

**slides:** <https://docs.google.com/presentation/d/18w3qctsDgc4gD4J9KPjtgLtM1eoVh_XO/edit#slide=id.p2>

look for an ‘engaging sprint/workshop’ + interactive?

**Day 1: 23rd Jan 2023**

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| **Time** | **Session** | **Task** | **T** | **Participants** |
| 09:30  –  10:00 | Introduction | Presentation:   1. Cogent project and collections 2. Endpoints 3. LinkedARTeveldestad proposal 4. Contact with RouteYou 5. Goal workshop: end2end minimal app   Q&A  Deliverables: project initiation | 15’  15’ | ALL |
|  | | | | |
| 10:00  –  10:50 | [Start with Why!](https://en.wikipedia.org/wiki/Start_with_Why) | [Value Proposition](https://www.designabetterbusiness.tools/tools/value-proposition-canvas):   * Ideation: what is in scope? (plants?) * Consolidate * [link to canvas.jpg](https://www.designabetterbusiness.tools/static/tools/value-proposition-canvas.jpg)   Backlog:   * Scheduling, distribution of tasks, creation of groups and online PM tools * Creation of a backlog + roles (Scrum/Product M/Teams) | 40’  10’ | ALL: 2-3 groups |
|
| COFFEE BREAK: | | place order for lunch | 10’ | ALL |
| 11:00  –  12:30 | Data extraction  workshop | Tutorial Cogent:   * SPARQL API of Cogent   Experiment with Cogent APIs | 30’  60’ | ALL: groups of 1 |
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|  | | | | |
| 12:30  –  13:30 | Lunch | Consume takeaway |  |  |
|  | | | | |
| 13:30 – 14:00 | Consolidation | What are the current blocking issues?  Tutorial RouteYou:   * RouteYou API: routes, POIs | 15’  15’ | ALL |
|  |  |  |  |  |
| 14:00 - 15:30 | Enrichment | Parallel sessions:   1. Image extraction and prep 2. RouteYou POI extraction 3. NLP approach |  | group I  group II  group III |
|  | | | | |
| 15:30 - 16:00 | Let’s go for a Route! | (install RouteYou on your phone and explore it during a short hike) |  |  |
|  | | | | |
| 16:00 - 17:15 |  | Parallel sessions:   1. Image enrichment approaches 2. Path generation: tags 3. Path enrichment: RouteYou text (a first push) |  | group I  group II  group III |
| 17:15 - 17:30 | Stand up | Discuss the current results: 3x5 minutes demo + assess what is in scope tomorrow |  |  |

Backlog of activities:

* data extractions: APIs cogent; APIs routeyou POIs; Note: both images, tags and text

**Day 2: 24th Jan 2023**

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| **Time** | **Session** | **Task** | **Participants** |
| 09:30 – 10:45 | Enrichment | 1. Classification 2. query->path and similarities analysis 3. RouteYou: Result ingest |  |
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| 10:45 - 11:00 | Update | Everybody gives a status update |  |
| COFFEE BREAK |  |  |  |
| 11:15 - 11:30 |  | Tutorial: Advanced path queries in RouteYou - what is possible? |  |
| 11:30 - 12:30 |  | 1. cont. 2. cont. 3. RouteYou: (custom) route generation |  |
|  | | | |
| 12:30 – 13:30 | Lunch | Sandwich; Keep the teams thing open! |  |
|  | | | |
| 13:30 – 14:00 | Consolidation | What are the blocking issues of the moment? Organize to create end-to-end |  |
| 14:00 - 16:00 | Integration | 1. design the required steps for initial deployment of demo (agree on a number of contracts ~ JSON model) 2. implement, generate all enriched data + ingest test in RouteYou 3. think of a number of UATs |  |
| 16:30 – 17:00 | Testing / Demo |  |  |
| 17:00 – 17:30 | Closing | Takeaways + Wayforward |  |
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**STARTING GUIDE**

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| **Sr No** | **Task** | **Link** |
|  | Extracting data from Cogent | SPARQL Tutorial + start code ?? |
|  | Check limitations Cogent |  |
|  | Extracting RouteYou POI data | Tutorial + start code ?? |
|  | Check limitations RouteYou |  |
|  | How to add POI in RouteYou | Tutorial + start code ?? |
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|  | Cogent documentation | https://coghent.github.io/LDES/ |
|  |  |  |
|  | Yolo model (if additional tags required) | https://towardsdatascience.com/yolo-object-detection-with-opencv-and-python-21e50ac599e9 |
|  |  | Demo: https://colab.research.google.com/github/ultralytics/yolov3/blob/master/tutorial.ipynb |
|  |  | Class information: https://github.com/leggedrobotics/darknet\_ros/blob/master/README.md |
|  |  |  |
|  | NER Models | CoreNLP: https://stanfordnlp.github.io/CoreNLP/ |
|  |  | FlairNLP: https://github.com/flairNLP/flair |
|  |  |  |
|  | Plant identification | https://identify.plantnet.org/ |
|  |  |  |
|  | Google vision API | https://cloud.google.com/vision/docs/drag-and-drop |
|  |  |  |
|  | Open image dataset | https://ai.googleblog.com/2022/10/open-images-v7-now-featuring-point.html |
|  |  |  |
|  | DBScan | https://scikit-learn.org/stable/modules/generated/sklearn.cluster.DBSCAN.html |

**What do we want from this?**

* We need a PoC do demonstrate to Cogent partners in order to get additional info
* RouteYou guarantees stable deployment for 1 yr
* Dieter: who to contact for which issue!? (is the sports team people the best contact for Routing?)
* Dilawar: important to have a scope which aligns with the budget