DEEP demo

Newly Released NLP Features

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theDEEP.io
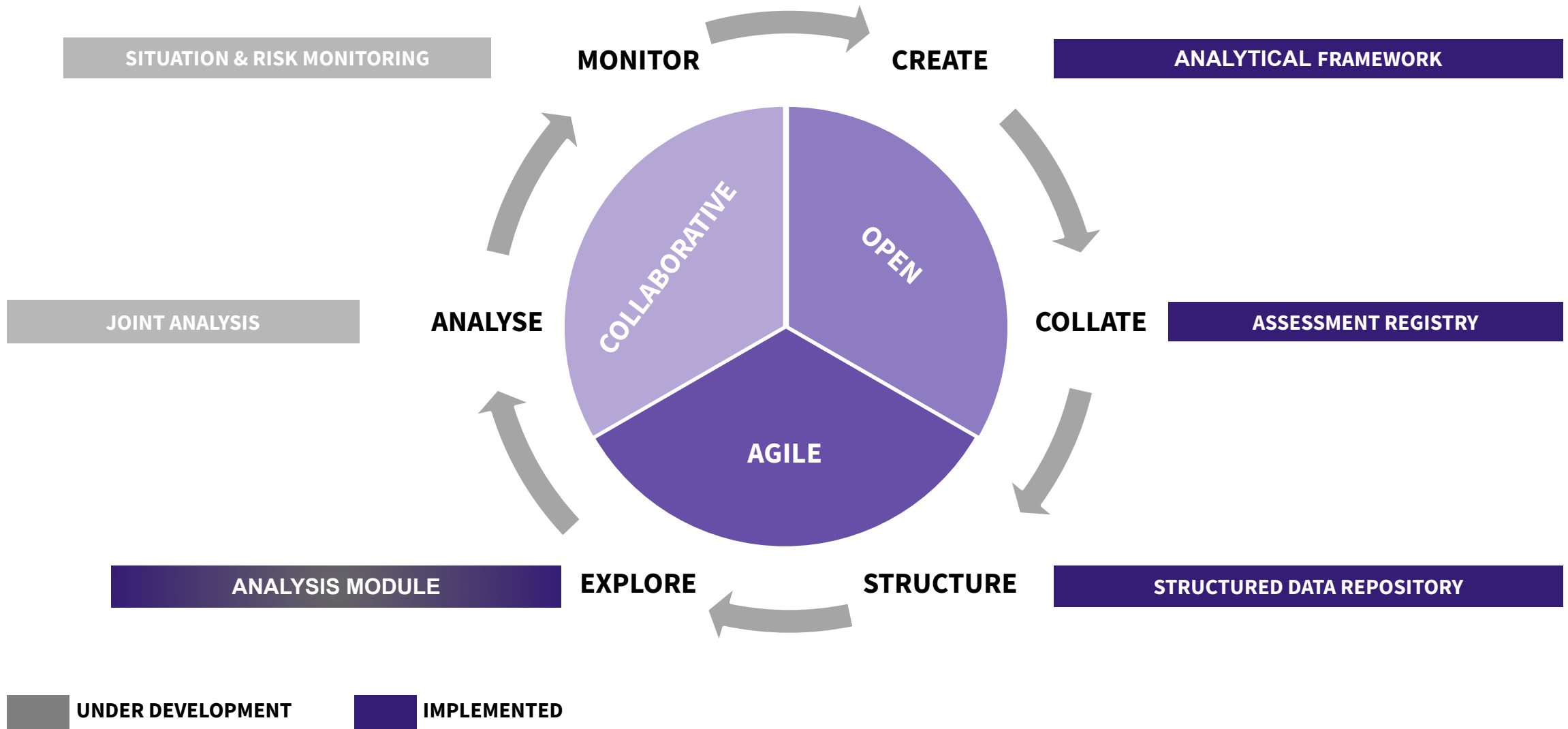
29 March

Diving DEEP Into NLP

Data Entry & Exploration Platform (DEEP)

Joint open source initiative

- Online platform to **support delivery of timely and credible situational and risk analysis** of crises and contexts.

- Suite of **sense making tools and collaborative workflows** for both structured and unstructured data.
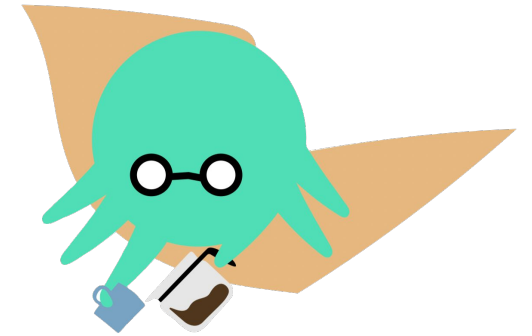
Principles & Analysis Flow

SITUATION & RISK MONITORING

ANALYTICAL FRAMEWORK

JOINT ANALYSIS

ASSESSMENT REGISTRY

ANALYSIS MODULE

STRUCTURED DATA REPOSITORY

MONITOR

CREATE

ANALYSE

COLLATE

EXPLORE

STRUCTURE

COLLABORATIVE

OPEN

AGILE

UNDER DEVELOPMENT   IMPLEMENTED

DEEP in Numbers

- ~ **300** Active Projects in **61** Countries

- ~ **4,000** Registered Users

- **> 50,000** Sources

- **> 400,000** Entries

Some case studies

- IFRC on Secondary data review for Yemen

- DRC on DEEP as a platform to support collaborative protection analysis

- iMMAP on Utilizing DEEP to guide primary data collection

- OCHA for Secondary Data analysis of the Ukraine response. Research and Academia: "Humanitarian severity and information gap measures using Possibility Theory"

Welcome to DEEP!

A COLLABORATIVE ANALYSIS PLATFORM
FOR EFFECTIVE AID RESPONSE

Curious about the platform?

⊘ **Explore DEEP**

LOGIN

New to DEEP?   **Register**

ximena@datafriendlyspace.org

••••••••••••••••   ⊘

Forgot your password?   >

LOGIN

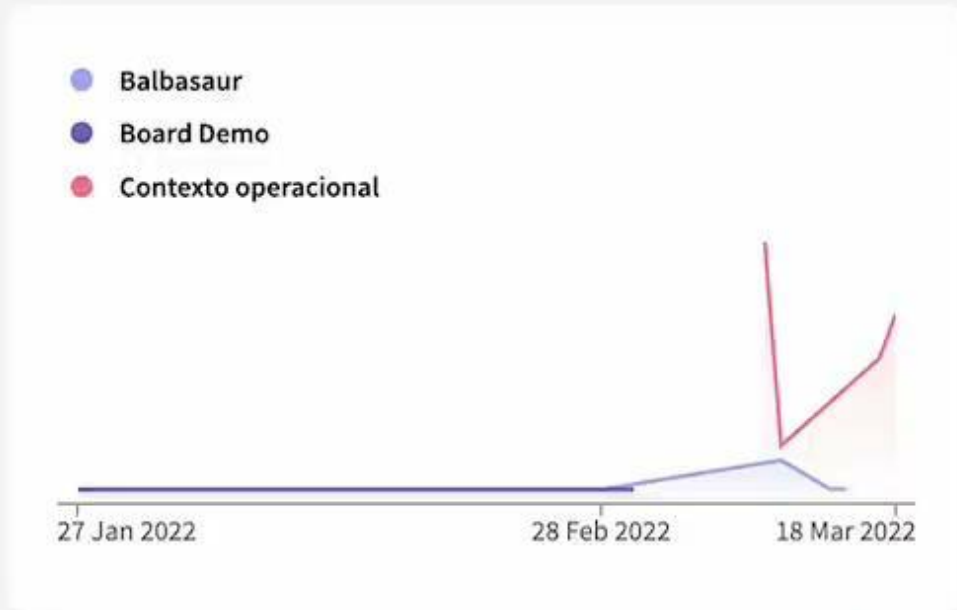**LOGIN WITH HID**

Terms and Privacy

SUMMARY OF MY PROJECTS

5 Projects

942 Total added sources

8% Sources tagged

0% Sources tagged & validated

PROJECTS TAGGING ACTIVITY LAST 3 MONTHS

- Balbasaur
- Board Demo
- Contexto operacional

27 Jan 2022   28 Feb 2022   18 Mar 2022

RECENT PROJECTS

Select Project   ⌄   **SET UP A NEW PROJECT**

Project 1

16 Jan, 2022 - 21 Jan, 2022

PUBLIC PROJECT   ✎ Edit project

For tutorial

MY ASSIGNMENTS   ✓✓

Ximena Contla assigned you to source
Community Perception Report - October 2021 heavy rains_0.pdf
in Project 1.

10:25 AM, Mar 21, 2022   ✓

Ximena Contla assigned you to source
Rights violation of women, children worrisome
in Project 1.

RECENT ACTIVITY

AM **Andrés Felipe Martínez** added a source on **Contexto operacional.**
02:55 PM, Mar 24, 2022

AM **Andrés Felipe Martínez** added a source on **Contexto operacional.**
02:35 PM, Mar 24, 2022

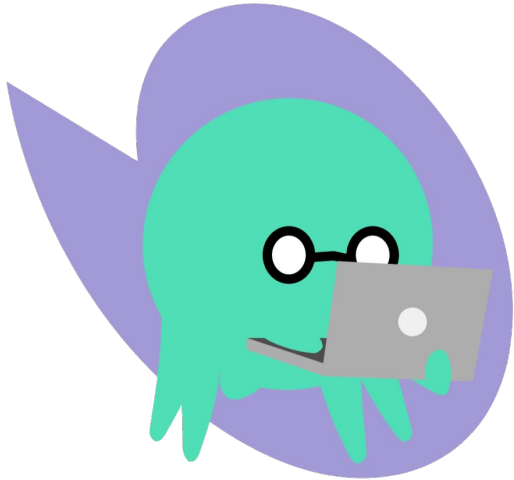AM **Andrés Felipe Martínez** added a source on **Contexto operacional.**
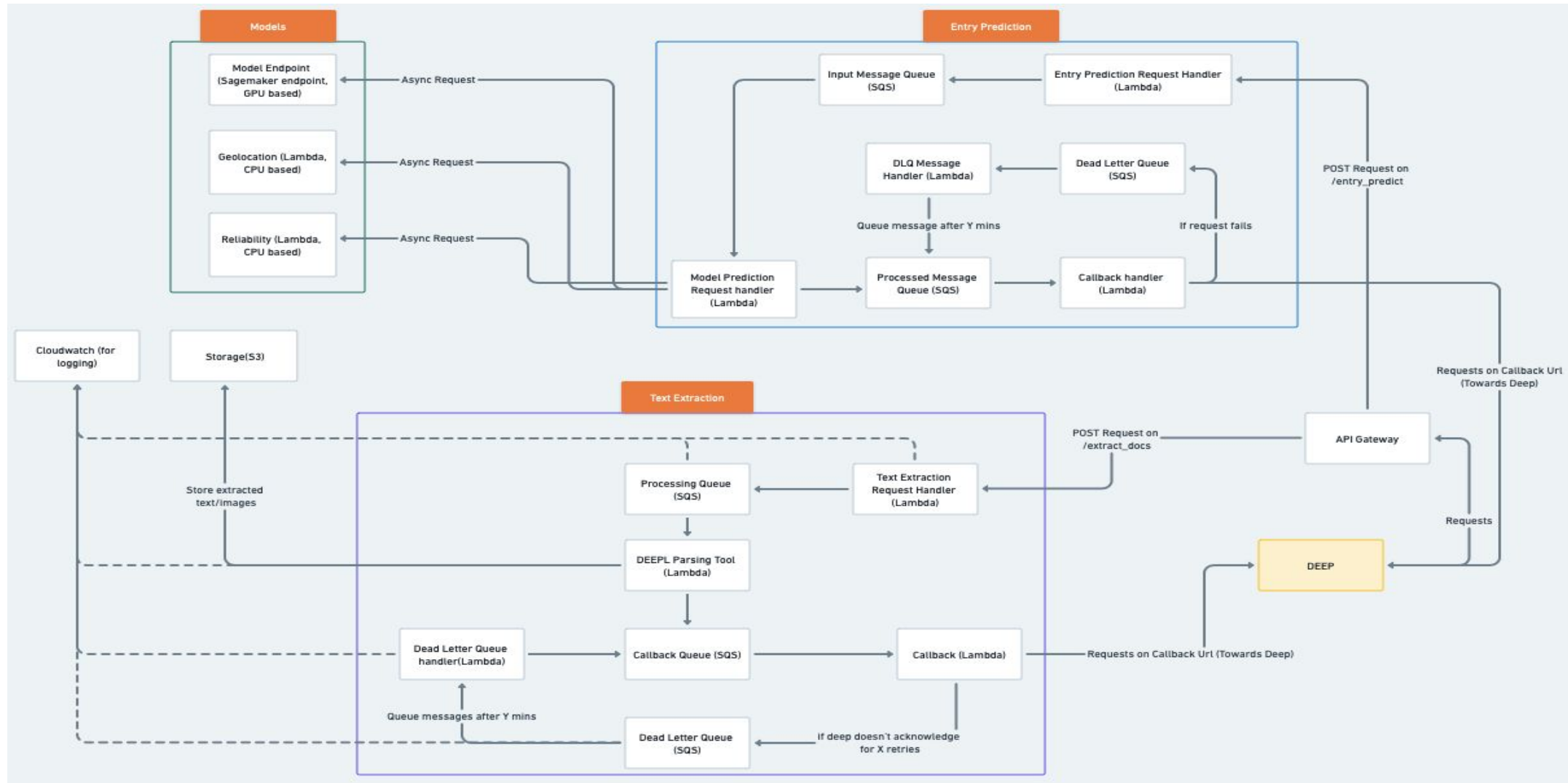
Sources tagged

Natural Language Processing

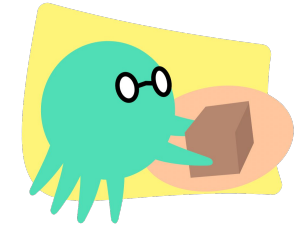Tailored to work on common humanitarian analysis frameworks

Trained on data from DEEP

Reduce tagging time to support timely analysis in crisis situations

DEEP

DATA
FRIENDLY
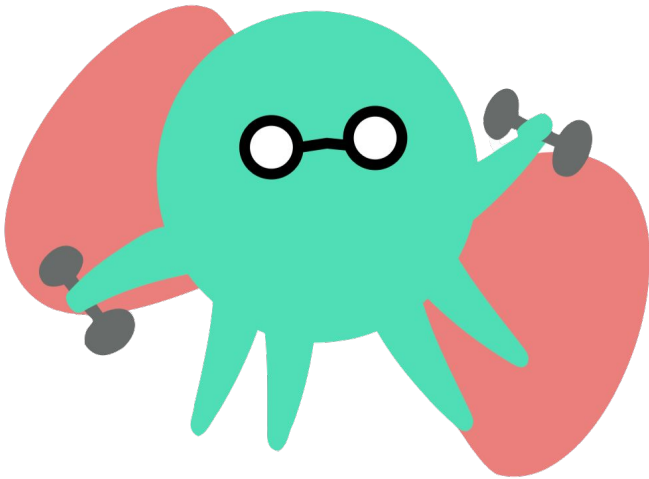SPACE

DEEP- NLP Infrastructure
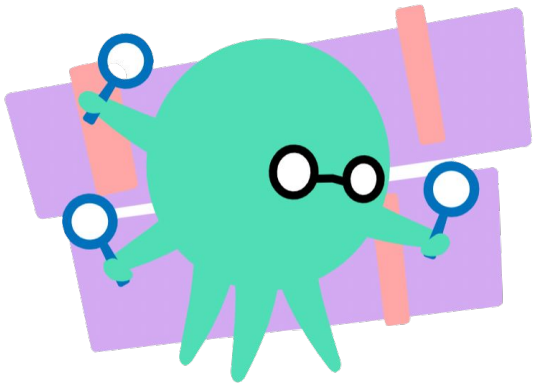
DEEP - NLP Infrastructure

- NLP infrastructure setup in AWS is isolated from DEEP

- NLP Infrastructure consists of Model Deployment, Text Extraction and Entry Prediction

- Model Deployment: Transformer model deployed in a Sagemaker endpoint, other two as lambda functions.

- Text Extraction: Real-time extraction of texts from several different file formats (e.g. pdf, docx etc) and webpages.

- Entry Prediction: Gets the real-time Tag predictions on requested entries.

- Entry Extraction and Entry Prediction blocks consist of several SQS and Lambda functions to handle bursts of requests from DEEP.

User interface

- Recently updated version of DEEP
- Development of an interface that could handle the NLP
- Consists of:
  - Framework matching
  - Tagging interface

Framework Mapping

- Dynamic nature of frameworks
- End user tag recommendations
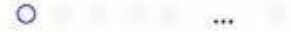- Feedback collection
- Further training

Tagging Interface

- Create entry based on mapping / recommendations

- Feedback form

10 Mar 2022   14 Mar 2022   23 Mar 2022

○ ○ ● ● ● ...

0%
Sources tagged & validated

RECENT ACTIVITY

AK **Aditya Khatri** added an entry on A.
10:23 AM, Mar 23, 2022

AK **Aditya Khatri** added an entry on A.
09:04 AM, Mar 22, 2022

AK **Aditya Khatri** added a source on A.
11:43 AM, Mar 21, 2022

AK **Aditya Khatri** added a source on A.

RECENT PROJECTS

Select Project ⌄   **SET UP A NEW PROJECT**

A   PUBLIC PROJECT   ✎ **Edit project**

Project owner   Recently active
Aditya Khatri   **Aditya Khatri** 10:23 AM, Mar 23, 2022

Analytical Framework   Top Taggers
Aditya's Framework **Aditya Khatri** 6

Team members   Top Sourcers
1   **Aditya Khatri** 51

🔖
51
Total sources

2% **Sources tagged**

6% **Sources in progress**

92% **Sources not tagged**

Project activity

A ⌄ ✎   Sources   Export   Add a source ⌄

21 Mar, 2022	Nepal - March 2011	-	UNHCR Portal		20 Jul, 2020	Aditya Khatri	Aditya Khatri
21 Mar, 2022	Nepal: Administrative map - 27 April 2015	1 page	UNHCR Portal		20 Jul, 2020	Aditya Khatri	Aditya Khatri
21 Mar, 2022	Nepal: Operational Map - 26 Sep. 2014	1 page	UNHCR Portal		20 Jul, 2020	Aditya Khatri	Aditya Khatri
21 Mar, 2022	Asia - UNHCR Presence - 28 March 2017	1 page	UNHCR Portal		20 Jul, 2020	Aditya Khatri	Aditya Khatri
21 Mar, 2022	WHO Nepal COVID-19 Epi Dashboard: Epi week 08 (21 February - 27 February 2022)	35 pages	ReliefWeb >	World Health Organization	01 Mar, 2022	Aditya Khatri	Aditya Khatri
21 Mar, 2022	Situation Update #97 - Coronavirus Disease 2019 (COVID-19) WHO Country Office for Nepal Reporting Date: 14 - 20 February 2022 (EPI Week 07)	16 pages	ReliefWeb >	World Health Organization	01 Mar, 2022	Aditya Khatri	Aditya Khatri

Image Slide