

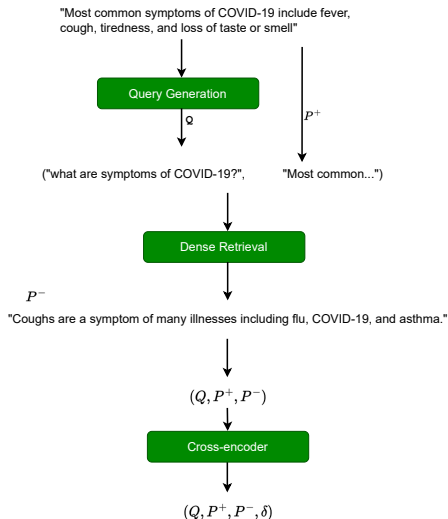
DDP Update

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Tasks done

- Generated three queries for each unstructured passage using Google-T5 model.
- Indexed vectors in a online database (pinecone) and performed negative mining using Distilbert.
- Used cross-encoder to generate similarity scores for both the positive and negative pairs.

Tasks done

```
{  
  "_id" : "4602",  
  "text" : "identifying the genetic contribution of a palliative patient's condition has utility fo  
  "title" : ""  
}
```

```
{  
  "_id" : "genQ1",  
  "text" : "describe how a human colony is classified in terms of its morphology"  
}
```

Tasks done

```
{
  "neg" : {
    "msmarco-distilbert-base-v3" : [
      "81423",
      "157122",
      "316535",
      "35856",
      "511432",
      "182744",
      "120306",
      "78297",
      "21407"
    ]
  },
  "pos" : [
    "4602"
  ],
  "qid" : "genQ1"
}
```

```
#query-id \t #pos \t #neg \t #margin
genQ1      4602 35856 18.465141
```

Query generation

✓ [15] passage

'identifying the genetic contribution of a palliative patient's condition has utility for their family, as it offers the positive measures are indicated and actioned [1]. however, up to a quarter of patients with life-limiting conditions, and the genetic counselling or testing prior to the terminal phase of their disease [2]. while genetic and genomic testing ('genetic testing the patient, it could help family members assess their own genetic risk and make health, reproductive, social and financial decisions may not identify eligible patients for genetic testing early in their disease trajectory because of low genetics knowledge of traditional treatment pathways [5]. palliative care then becomes the final opportunity to conduct a genetic risk assessment.'

✓ [16]

```
print("\nQueries generated using T5 model: \n")
for i in range(len(outputs)):
    query = tokenizer.decode(outputs[i], skip_special_tokens=True)
    print(f"{i+1}: {query}")
```

Queries generated using T5 model:

- 1: why is genetic counseling important
- 2: why is it important to discuss genetics with family members
- 3: what is the meaning of integrating genetic information into palliative care?