



L'Initiative d'éducation ouverte de l'EPFL

IA solutions pour
rendre l'éducation
ouverte et
accessible.

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Ressources éducatives ouvertes

Contenu qui est

- ❖ Découvrable, disponible, gratuit, licence ouverte
- ❖ Accessible, inclusif
- ❖ Significatif - Augmenté/Enrichi



Nos ressources éducatives ouvertes

	Discoverable	Available			Gratis	Licence	CC
		Class	EPFL	World			
Videos	EPFL graph	20%	60%	20%	yes	Unclear	no
MOOCs	US platforms	5%	0%	95%	limited	Mostly	no
Exercises	Exoset	0%	100%	0%	yes	Unclear	no
Quizzes	Moodle	100%	0%	0%	yes	Unclear	no
Jupyter	git	0%	0%	100%	yes	Mostly	no

Rechercher des ressources pédagogiques

Besoins d'étudiants

- ❖ Recherche basée sur le sujet, le mot-clé, le professeur, le nom du cours, le chapitre du cours, le niveau.
- ❖ Accès à du contenu interactif pour se former et se tester
 - sans inscription : unique, aucune progression stockée, présentée sur la page Web
 - avec inscription : liens vers le cours complet, progression stockée et disponible

Besoins d'enseignants

- ❖ Recherche basée sur le sujet, le mot-clé, le professeur, le nom du cours, le chapitre du cours, le niveau.
- ❖ Accès à des contenus interopérables à réutiliser
 - indépendant de la plateforme
 - facile à adapter
 - facile à contribuer/mettre à jour la collection

Besoins d'organisation

- ❖ L'indexation suit les standards (exoset, graphsearch, ...)
- ❖ Le stockage, la surveillance et la gestion des bases de données sont efficaces et efficaces
- ❖ L'interface et le protocole de recherche suivent un standard, intégré à l'interface existante (exoset, graphsearch, Graasp)

Graph search

OER not available yet trough graph search

OER available trough graph search

Exercises
- source: Exoset

Quizzes
- source: Mooc & Moodle

Concept explanation:
- source: wikipedia

Related concepts
- source: wikipedia

graph

Q sampling

EPFL Graph

Concept
Sampling (statistics)
In statistics, quality assurance, and survey methodology, *sampling* is the selection of a subset (a *statistical sample*) of individuals from within a statistical population to estimate characteristics of the whole population. Statisticians attempt to collect samples that are representative of the population in question. Sampling has lower costs and faster data collection than measuring the entire population and can provide insights in cases where it is infeasible to measure an entire population.

Each observation measures one or more properties (such as weight, location, colour or mass) of independent objects or individuals. In survey sampling, weights can be applied to the data to adjust for the sample design, particularly in stratified sampling. Results from probability theory and statistical theory are employed to guide the practice. In business and medical research, sampling is widely used for gathering information about a population. Acceptance sampling is used to determine if a production lot of material meets the governing specifications.

Related concepts
Survey methodology, Opinion poll, Questionnaire, Categorical variable, Regression analysis, Linear regression, Logistic regression, Generalized linear model, ...
Show all

Courses where this concept is taught

- COM-516: Markov chains and algorithmic applications
- MICRO-511: Image processing I
- MATH-448: Statistical analysis of network data
- CS-119(a): Information, Computation, Communication
- CS-119(K): Information, Computation, Communication

Show all

Publications addressing this concept

- Sampling methods for parametric non-bandlimited signals
I. Maravic, EPFL, 2004
- Bayesian risk analysis of financial time series
C. Ouesaki, EPFL, 2009
- Shift-Invariant and Sampling Spaces Associated With the Fractional Fourier Transform Domain
A. Bhandari, IEEE Transactions On Signal Processing, 2012
- (Geometry Aware) Deep Learning-based Omnidirectional Image Compression
Y. Sepelki, 2020

Notebooks,
- source: Noto

MOOCs
- source: courseware

Videos:
- source: Kaltura

For credit course-descriptions
- source: ISA

Videos of for credit-courses
-source: Kaltura

Publications

People

Units

NOT OER

Quizzes & exercices

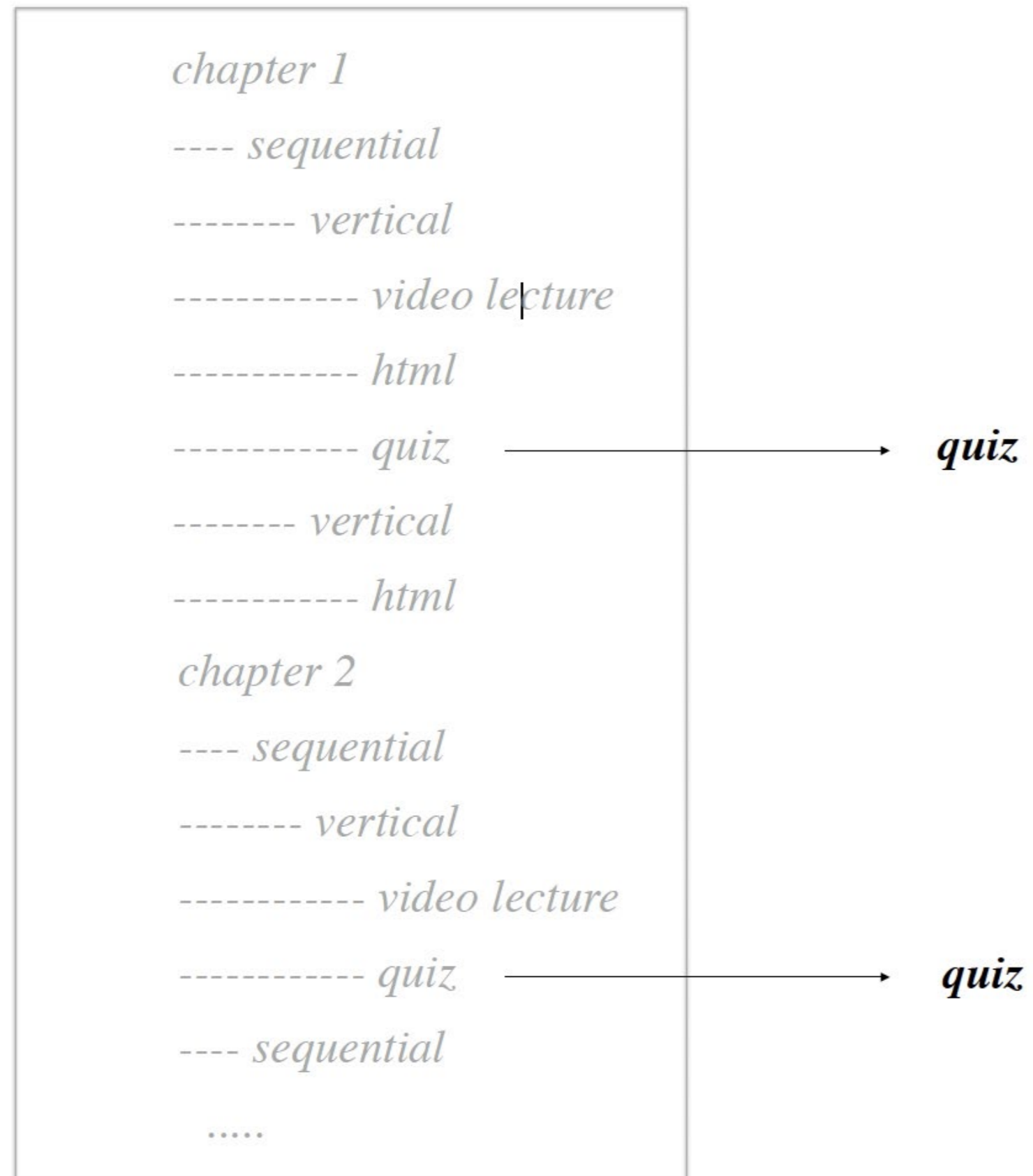
Discoverable, disponible, augmenté

Composants individuels pouvant être recherchés

Composants individuels pouvant être présentés et avec lesquels interagir

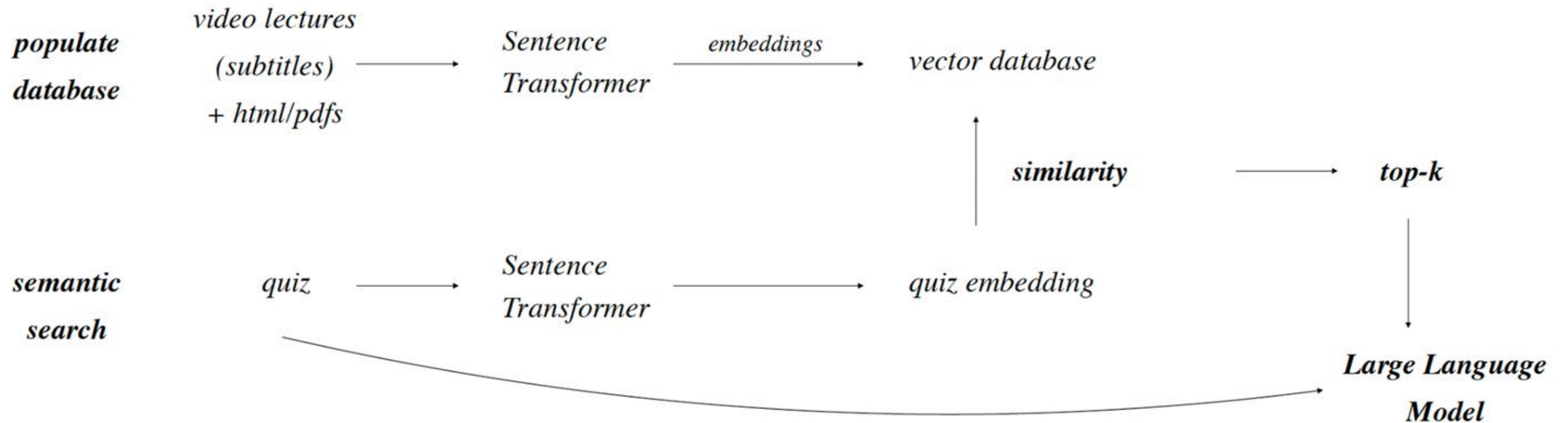
Composants individuels pouvant être réutilisés

Explorer le contenu et structure d'un online course

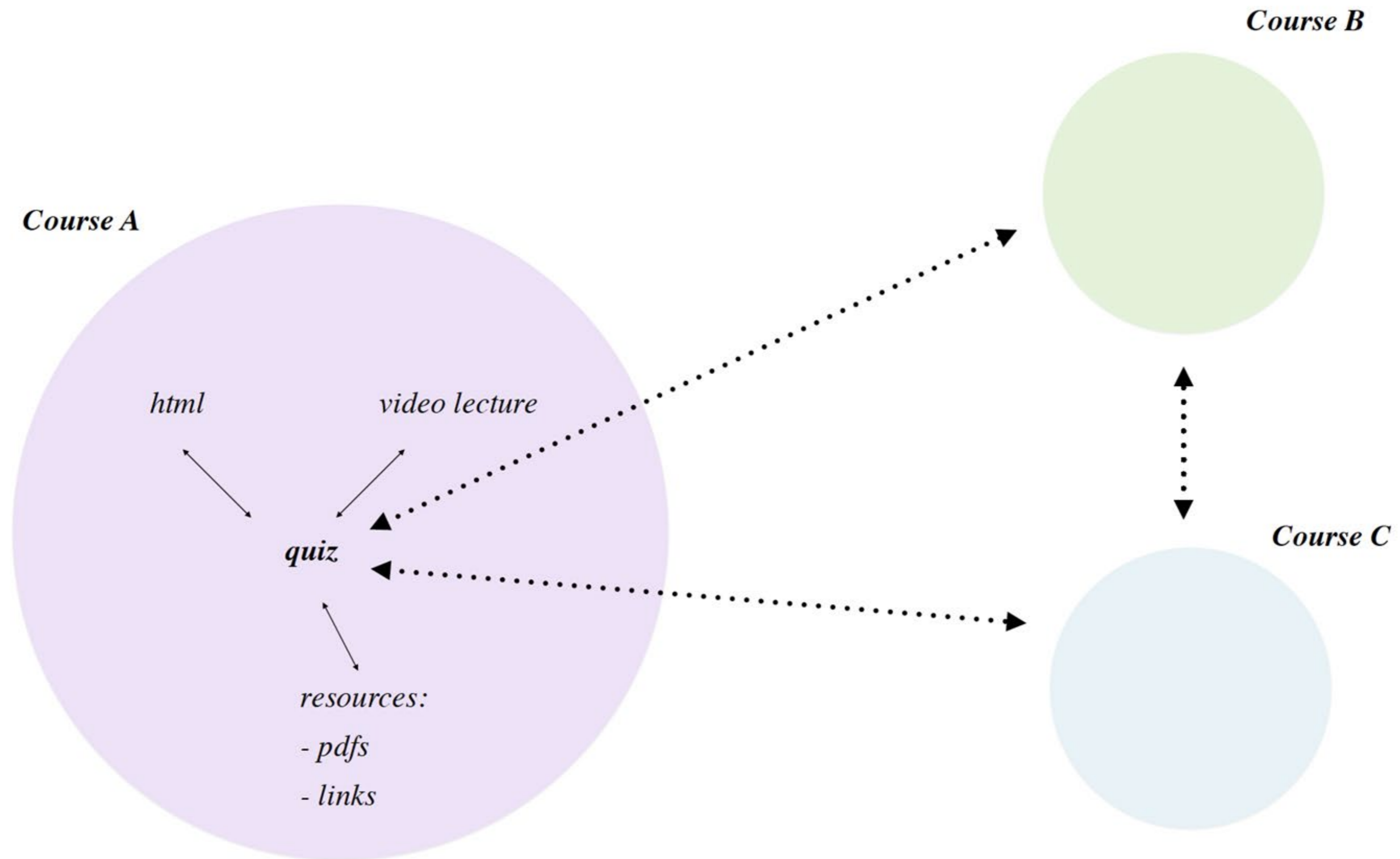


Embeddings

- *Embeddings are vector representations in a multidimensional space.*
- *We are using a Sentence Transformer model that was tuned for semantic search for generating text embeddings.*

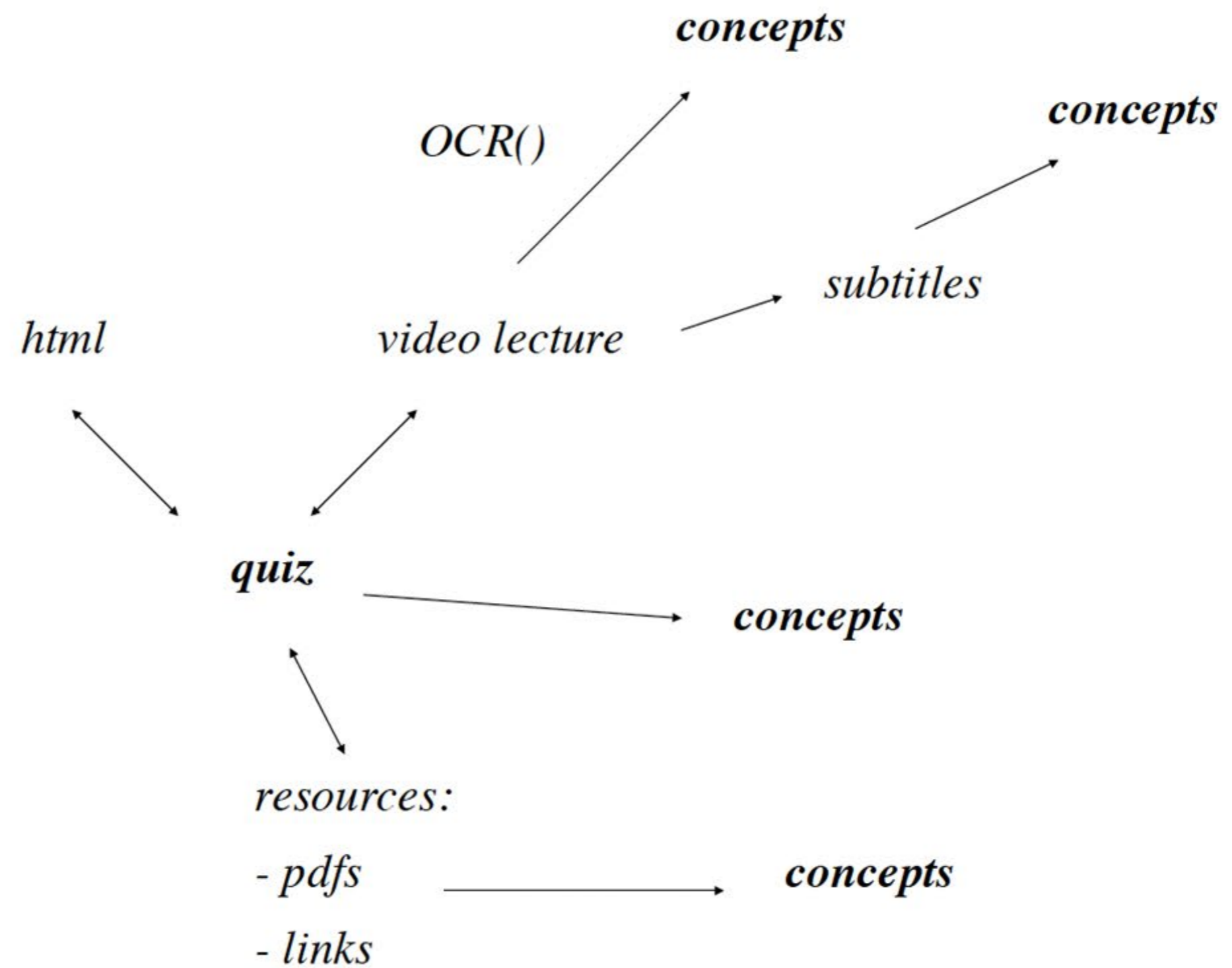


Analyse sémantique



Semantic Analysis

EPFL Graphsearch



Graph search

OER not available yet trough graph search

OER available trough graph search

Exercises
- source: Exoset

Quizzes
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Concept explanation:
- source: wikipedia

Related concepts
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EPFL Graph

Neutrophil

Explanation
hwgeuhjsa jdséah duerbjakk de gstera kkliroasuad.hwgeuhjsa jdséah duerbjakk de gstera kkliroasuad.

Courses
(videos segment)

People

Publications
• hwgeuhjsa, F.T. jdséah, G.H. (2032). Duerbjakk de gstera

Test yourself
Feedback
Video segment

Teach yourself
Video segment

Course chapters

Notebooks,
- source: Noto

MOOC (chapters)
- source: courseware

Videos:
- source: Kaltura

For credit course-descriptions
- source: ISA

Videos of for credit-courses
-source: Kaltura

Publications

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