Hindi Shabdamitra: A digital aid for language teaching and learning

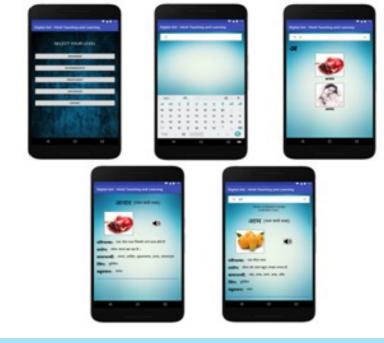
हिंदी शब्दमित्र (Hindi Shabdamitra) is an e-learning product meant for Hindi language teaching and learning. It uses Hindi Wordnet which is further augmented with audio-visual features, grammatical properties and is presented in a learner-friendly layered format.

Mastering vocabulary is a major part of language learning. Understanding a word involves committing to memory its form, capturing its relationship with other words and finally knowing how and where to use it. Word relationships and meaning relationships are very helpful in firmly establishing word-meanings and word-usages in the mind of learners. For example, the fact that 'horse' is a kind of 'animal' (hypernymy relation), 'uniform' is opposite of 'diverse' (antonymy relation), 'cultivate' has as its object 'land' (argument entailment relation), greatly assist in understanding these words. Wordnet, an online lexical database, based on psycholinguistic principles, is built around lexical and semantic



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Hindi Shabdamitra web interface: Level-wise
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खपच्ची 🔤 🔍	खपच्ची 📣	NOUN (नाम वाले शब्द)
CBSE Class 2 Lesson 14		परिभाषा - बाँस आदि की पतली लचीली तीली वाक्य में प्रयोग - वह खपच्ची से टोकरी बना रही है । समानार्थी शब्द - खपची
साड़ी खपच्ची अनाज		
शरारत		
शहर		
बिल		
दिल		



Hindi Shabdamitra mobile interface

relations which are cognitive universals, i.e., these relations are found in all languages. Such a resource can be a valuable aid in teaching a language. The Wordnet data is a rich resource of vocabulary. The IIT Bombay in coordination with other Indian Institutes has built Wordnets of 16 Indian languages. In Hindi Shabdamitra, Hindi Wordnet data has been remodeled to suit the school teaching and learning environment. Wordnet information is being displayed in a layered manner, suitable for students of lower classes, up to the higher level, each layer capturing the suitable level of abstraction. Here, the definitions of words / concepts are further simplified and grammatical features are added as per school curriculum. The learning process has been aided with pictures and audio pronunciations. Hindi Shabdamitra, is a comprehensive language teaching and learning aid with the focus on vocabulary and grammar learning, suitable for both formal and informal methods. It is available in the form of web interface and mobile interface. In the recently conducted field tests, the tool was demonstrated to school teachers and students. Based on the feedbacks received from the target audience, the tool has been improved and made more robust to match with their needs. This project is being executed at the Centre for Indian Language Technology (CFILT) at IIT Bombay, since 2016 and is funded by the Tata Centre for Technology and Design (TCTD), IITB Bombay.

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