The XLM (Cross-lingual Language Model) is a language model developed by Facebook AI Research (FAIR) that can understand multiple languages and perform cross-lingual tasks. The development of XLM took several months, and the development team consisted of several researchers from FAIR.

XLM was trained on a variety of multilingual datasets, including the Wikipedia dump of 100 languages, MultiUN corpus, and several parallel corpora. These datasets contain a large number of sentences in multiple languages, which are used to train the model to understand and generate language in a variety of languages.

The architecture of XLM is based on the Transformer architecture, which is a type of neural network that is particularly well-suited for natural language processing tasks. XLM uses a modified version of the Transformer architecture, which includes cross-lingual training objectives and a language-specific tokenization scheme. The cross-lingual training objectives are designed to encourage the model to learn representations that are shared across multiple languages, while the language-specific tokenization scheme is designed to capture language-specific features.

One of the key features of XLM is its ability to perform cross-lingual tasks, such as cross-lingual document classification, cross-lingual question answering, and cross-lingual named entity recognition. This is achieved by training the model on multiple languages and using the shared representations learned by the model to perform cross-lingual tasks.

XLM has achieved state-of-the-art results on several benchmark datasets for cross-lingual tasks, including XNLI, MLQA, and Tatoeba. The model has been shown to perform well on a variety of languages, including low-resource languages.

In terms of evaluation, XLM is typically evaluated on standard benchmark datasets and compared against other state-of-the-art models. The quality of the model's predictions is measured using various metrics, such as accuracy, F1 score, and mean average precision (MAP). XLM has been shown to outperform other state-of-the-art models on several benchmark datasets for cross-lingual

tasks, demonstrating its effectiveness for understanding and generating language in multiple languages.

Overall, XLM is a highly effective and versatile language model that can understand and generate language in multiple languages. Its modified Transformer architecture, cross-lingual training objectives, and language-specific tokenization scheme make it well-suited for performing cross-lingual tasks with high levels of accuracy.