

Let us introduce you a new generation e-learning system that is on cutting-edge of latest technologies in the industry. YipTree is a personal learning environment (PLE) made by using latest web technologies that brings high performance and easy-to-use user interfaces for end-users. Our modern user interface is specifically designed for students and teachers in primary and secondary schools. YipTree is a cloud service that can be used with any device and can be accessed anywhere with single sign-on for all integrated services.

For exciting and motivating user experience we are bringing in elements similar from video games: YipTree provides personalized learning paths through different selection steps during the course. In these selection phases students chooses difficulty level, preferred learning style and personal learning goals. After successful completion of courses and learning assignments YipTree rewards students with learning badges. Competitiveness is brought also fun and cool way in form of leaderboards. We also want encourage students to go outdoors and learn STEM topics from experiences of real world phenomenon. To achieve this we have designed a learning based geo-location game, in which students explores real world locations and complete assignments. Geo-location game will be provided as integrated mobile application and can be used with any device and operating system.

YipTree makes planning of the courses fast and easy with provision of ready made learning material and course templates. Our course designer tool enables flexible planning of learning content according to curriculum. Navigation between course topics in YipTree happens in a new way: lessons are organized in a “tree” -structure, which makes navigation easier and fun. Learning trees works as mind maps that shows the relations between topics. Tree -navigation can be also used as a mind map tool to create personal learning portfolios.

Our solution is able to integrate most popular learning materials, such as learning games and learning tools by using latest e-learning standards: IMS LTI, IMS QTI, Common Cartridge and SCORM. Material Library provides easy access to interesting and relevant learning materials such as ebooks, games and virtual labs. We have made our Material Library as a centralized collection of different learning material web services. From Material Library users can easily take new 3rd party learning tools into use in plug-n-play manner. YipTree’s learning material is rich in metadata (IEEE LOM standard) enabling easy and intelligent searches and material recommendations. Using Experience API, we are able to store and collect learning information efficiently not only from our learning activities, but also from different learning environments and external learning materials.

Our intelligent and versatile learning analytics tool brings possibility for teachers and students to monitor and analyze their learning process and identify possible learning problems. Our solution doesn’t only monitor user’s learning results, but other kind of learning activities, such as social activity, time spent on tasks and general activity in the PLE. Learning analytics tool is accompanied with smart parent support system that can send summarized analysis of students learning process with instructions how to proceed in learning problem situations.

Interactivity and social aspects are important part of learning, and because of this YipTree offers various of communication and collaboration tools. Discussion boards familiar from social media can be used for organizing learning activities, sharing interesting topics and learning material. Chat tools can be used private and group discussions, but especially for

peer-support when students have problems in certain learning tasks. Video Conference tool is useful for organizing teaching and learning projects remotely. YipTree provides a simple and intuitive calendar tool, which can be used to organize and schedule online meetings between teachers and parents in a smart way, similar to virtual office hours: choose the time you prefer and YipTree does the rest!

Besides aforementioned, our solution differ from other e-learning solutions in the market because of the artificial intelligence we have designed for YipTree. Provided artificial intelligence:

- Helps to personalize individual learning paths by offering recommendations of relevant learning materials, level of difficulty, learning styles and personal learning goals
- Automatically adapts students learning paths and styles according their performance and preferences
- Helps to identify learning problems and provides ways to solve the issues, for example by providing alternative learning material
- Helps students to understand theoretical topics of STEM in real world context by providing interesting suggestions of topics based on interests of each individual student
- Provides insights to future career opportunities in STEM subjects and professions
- Tutors and supports students in their tasks, helps finding information from right places and encourages to ask help from each other and trying out new ways to learn
- Automatically creates metadata for courses and learning materials by analyzing the content

YipTree's artificial intelligence is not just invisible algorithms running in background, but live and active virtual characters assisting, guiding and supporting users in their personal learning.

With YipTree and it's innovative solutions we seek best approaches to support lifelong learning, inspire and delight new generation of learners. We want to make learning more easy and fun!