

Classes Timetable Program Proposal (Draft 0.1)

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1 In Feishu service

1.1 Class and event recording and recommending

1. A individual wizard for setting class timetable manually, with improvements for setting repeating events which may vary slightly in location, time, link etc more conveniently.
2. Introduce tag system to classes events. Thus, both students and instructors may assign certain topic or field to events. This enables a simple recommend system. Modern similarity evaluation methods may be applied to evaluate the weight of tag given by each individual, basing on past academic experience and class attendance etc.
3. As improvement to simple tag system, most universities publish information of every course it sets as separate HTML pages which contains few scripts or changeable elements with formal and expectable structure, making a light-weighted and efficient crawler possible. Basing on data collected by this crawler, an automatic clustering and recommend system can be built.

1.2 Scheduling

Provide a customized version of current task function of Feishu for campus life. The characteristic of campus life is that is highly routine, time limit is usually definitely strict, and time can be divided into regular and expectable blocks.

1. Tasks and sub-tasks. Allow users to set tasks and sub-tasks that are sequential or parallel.
2. Tags and sub-tags. Allow users to assign tags and sub-tags to each task.
3. Projects. Allow users to set up projects that may contain multiple tasks, general tags and general deadline.
4. Review and remind. The most important part of a task system is whether it makes users trust it enough to leave all worries to it and focus on current task users are doing. By allowing users to set routine reminders to remind them to schedule tasks, e.g. beginning of day and review of all tasks, e.g. end of every week, it can help setting up such trust to users.

Of course, all of above functions will allow users to manually and automatically connect them to assignments and classes. Automation won't be hard basing on clustering and tag system of classes and events.

2 Out Feishu service

2.1 Canvas compatibility

Canvas is currently widely used around Universities in the world. Canvas provides API for operation outside canvas website and mobile app basing on Canvas API token authentication. This allows third-party services to download files, read or write event/appointment/calendar/assignment etc. By integrating canvas token and API with Feishu can allow students to automatically import all information on canvas to Feishu.

2.2 Calendar compatibility

Summing up all events and reminders Feishu collected about classes and export them as subscribe-able calDav/iCal URL. Also enable cardDav service for students to get contact of classmates as well as instructors. Thus, students can get access to in time and necessary data across all platforms that may haven't been supported by Feishu as long as their device supports calDav/cardDav, which includes almost all modern devices and applications.