Evaluation Protocol (formalized)

Initial Conditions

- Participants
 - The target audience of 'active' user is rather limited (although it has large impact on the life on a large number of teachers and students; they have to cope with the timetable they get)
 - We will focus on the person in charge of timetable generation in school (lets call him the TimeTableist)
 - We got 3 interviews
- Location
- When
- Consent
 - · Adapt provided template.
 - See the attached document
 - Signed version is in French
- Remarks
 - French speaking person -> interview was conducted in French but we have filed it in English
 - Yellow background is used in this document to identify formalized input issued by the evaluation interviews
 - The remaining information from the interview are hold in a separate document called evaluation transcript. The form is an un-phrased transcript document.

Test

- What is tested ?
- Methodology
- Training
- Environment Questions
 - School Demographics Questions
 - Number of Teacher
 - 56 / 35 / 96
 - Number of Students
 - 500 / 350 / 1000
 - Number of Classes
 - 22 / 16 / 54
 - Number of ClassRooms
 - 38 / 24 / 69
 - Number of Persons involved in TimeTable generation
 - We suspect answer is 1 but is this true ?
 - 1/1/2
 - Computer Environment Questions
 - Browser used
 - FireFox 10 / IE 9/Chrome 19
 - Screen Resolution used
 - 1920 x 1080 / 1366x768 / 1920 x 1080
 - One of screen where smaller than expected but the user was using 2 smaller identical screens
 - Compare implicit(observed) replies with what they say
 - No one answer precisely (they do not care about it)
 - See if tablet make sense in this specific context
 - We think it is OK for specific view but some of the global views require a big computer screen
 - No one thought
 - Sociodemographic questions
 - The type of people is clearly identified, they share the same characteristics except of few we need to figure out
 - Are they paper-and-pencil or computer minded ?
 - Are they scientific (math, ...) or not ?
 - 2 are accountants, 1 is social science this later is paper-and-pencil, the other 2 are 'computer'
 - Rem: these 'environment questions' may be answered aside the core rendezvous, they may be answered over the phone before or after the rendezvous but they need to be addressed.
 - There is an obvious exception for browser and resolution used

• User Scenario under test

- Digest of answers are found in Summary of findings
- Add 1 student
 - Allow to set a default value for each field of new student (especially for the initialization method) to lower the work of the TimeTableist. The idea is to avoid handling individually any student except 'special case'
- Add 1 teacher
 - a teacher with low degree cannot teach to high degree class
 - a teacher gives more than 1 course, the screen 1 teacher+course is over simplistic
 - teacher are re-evaluated once on a while
 - a teacher provides his preferred days

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- some teacher are part-time
- Add 1 course
 - there is a pool of teacher that can give the course
- Manage 1 ClassRoom
 - not all the classrooms are the same, most of them are similar, a few are very specific like gymnasium, physics lab, swimming pool, ...
 - some 'classrooms' do not belong to the school, they are used part-time (swimming pool)
 - add notion of distance between classroom
- Setup Rules
 - when on the initial design of this screen, all of the 3 persons told us about mandatory rules and lest strict constraints
 - lots of rules/constraints are not listed (we were aware of this)
- Free test
 - Be prepared/leave some place for the unexpected even it may not be compared between testers.
 - It may be a good source for further testing if required... or further features improvement
 - Brainstorm was very intense, these 3 people enjoy the subject, we have collected plenty input, some of them are still to be
 digested, we have left them in a separate document (our evaluation 'transcript') that is not yet formalized and integrated in this
 evaluation protocol document

Measure performed

- All the 'Environment Questions' raised above
- During the design phase we managed to leave free form fields to catch missing items
 - See our evaluation 'transcript'
 - Use of Comment fields
 - Repetition of content in Comment fields
 - If we see some input in there, it means it is a candidate for a new field in form (-> in the database)
 - Use of other constraints
 - It means this constraint is missing in the list
 - Verify it is not very specific to 1 school else we need to update the prototype
- Number of aloud comments: I cannot formulate that additional constraint

Additional Questions at the end of the experiment

- Contacts
 - **Do you have some colleague in another school for more testing ? (would you please introduce me ?).
 - These people are probably more critical since they do not have any link with me.
 - They may be required when re-deign would have been done to finalize the application.
 - Since resource are limited, good introduction is a key to get in touch with key person in a small amount of time. The anonymous way is more lengthy and potentially unsuccessful in this circle of people.
 - We have collected 5 new contacts
- Our design
 - See our evaluation 'transcript'
 - Is there any item in fields that does not make sense to you? (in other term are they useless? or never used!)
 - Is there any family of constraints that is missing ?
 - Based on what was observed, we shall try to synthesize missing item into family (organize them in related chunks)
- The current way of doing TimeTable
 - How did you do it until now?
 - This allows us to compare with our proposed solution to the TimeTableist problem.
 - How did you take constraints into account ?
 - What are the constraints you take into account ?
 - What are the constraints you cannot take into account ?
 - 2 of them are using Excel with very limited constraints and do most of the job manually
 - 1 does it with lego!
 - they reuse the timetable of the previous year and perform some swap between items
 - flexibility is very very low
 - timetabling is becoming harder since school program are diversifying as times goes by
- Rem: these questions are raised during the rendezvous
 - Always leave them a possibility to add observation after rendezvous if any but we should not get any after 48 hours