Question Bank 2.0: How we made it easier for our users to submit questions.

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and Special Guest



About the University of Kentucky

- 1865 started as a land grant institution
- Student Population: 31,000
 - Full-time 28,000
 - Part-time 3,000
 - Undergrad 23,000
 - Graduate 8,000
- Full-time faculty: 2,400
- Course Sections per semester: about 8500
- Made up 17 colleges and a Graduate School



Teacher Course Evaluation(TCE) at the University of Kentucky

- Centralized Common Question set for over 30 years
- 35 core questions
- Until summer 2015, the majority was done on paper
- Fall of 2015, 14 of the 17 colleges and the Graduate School moved to online using Blue for most of their TCEs
- Fall 2015 111,000 invites were sent out to students

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Why we use Question Bank (Qbank)?

Additional Question needs:

- Up to 20 additional questions as prescribed by Faculty Senate
- 2. Need to be able to reuse questions from semester to semester
- 3. Need to have reporting on additional questions



What does our Qbank implementation look like?

- We have 1755 questions currently in our Qbank
- Questions are either comment or single selection
- Questions are broken down by Course or Instructor and at the 4 levels: College, Department, Course, and Section.



The old way we implemented the QBank

Implementation is in three not so easy steps:

- 1. Build the Question Bank (excel file)
- 2. Create the placeholders in Questionaire
- 3. Create the question mapping file (excel file)



Building the Qbank file or

"Getting the college contacts to get us the questions"

- 1. I created detailed instructions for the College Contacts to use when editing our modified Qbank file
- 2. I created a modified Qbank file with added columns for more info and sent them it with some sample lines already in it. I also removed the Option and Score columns (because we control the choices in our Likert scale).
- 3. Set a hard deadline (actually Faculty Senate approved this). We require the questions by the first day of the semester.



Creating the Qbank file

- 1. Take the excel file received from the College contacts and verify that everything looks correct.
- 2. Copy the file to a new file name for that college.
- 3. Remove the extra columns not needed by the Blue system.
- 4. Combine all of the files into a new file.
- 5. Save the file with the semester and date in the name.
- 6. Upload the file to the Blue system as the new Question Bank.



Create the placeholders in the Questionaire.

- 1. Go through the files sent to you from the college contacts and figure out how many of each type of questions you have.
- 2. Then create the placeholders in the Questionaire for each type. (It is important to do them all in order. This will make the mapping easier.)
- 3. We have 16 possible question type placeholders.



Partial Questionaire example

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	11	Class meetings contributed to my learning of the course content.	Single Selection	Edit Preview
	□ 12	Greding in the course was fair.	Single Selection	Edit Preview
	13	Assessments (e.g., teets, quizes, pepers, homework, projects) reflected course metarial.	Single Selection	Edit Preview
	14	1 understand how the final grade will be calculated in the course.	Single Selection	Edit Preview
	15	I consider [S\$NAME] to be a quality course.	Single Selection	Edit Preview
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	23	Dept_Crs_Com_005	Question Bank Comments	Edit Preview
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Create the question mapping file for your project

- 1. Export the mapping file from the current project after you have the questionaire created.
- 2. Use the excel file sent from the college contacts to figure out which placeholder the questions should be mapped to.
- 3. When done, upload the mapping file.

NOTE: The more placeholders the wider (in number of columns) the question mapping file will be

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How we now implement the Qbank.

Users get a GUI!!



I had a great idea!



Let's create a GUI interface and automate the question entering process.



One problem, not enough time.

Problem solved!

Meet Kelita Mayorga! My new assistant.

And she is great with technology!!



I shared my idea with Kelita.

We brainstormed and she started on the project.

Let's see what she created!



We built a 2-Tier Architecture Software App:

- TOOLS:
 - GUI Windows Form VB .NET 2017
 - SQL Server



Client/Presentation Layer

Database/ Data Layer



Analysis and Design (Creation of the E - R Diagram as a result)



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The steps behind the implementation...





Special Considerations

Edit

- •The Edit option allows to change the Text only.
- •It keeps the same Question Number
- •Internally the app is inserting a <u>new</u> question, since it is necessary to keep the original one for report proposes.
- •We keep the old and the new in the question bank, but we only include the new one in the Mapping File. For this we have a STATUS flag: Active / Inactive
- •A question can be edited only if the window of time for changes is open.

Delete

- •It only changes the Status of the Question to Inactive
- •It is necessary to keep the deleted ones for the Reports

Add

- •We have a Function that keeps control of the Question Number (We have a maximum of 14 for Selection and 5 for Comments).
- •Each Question Number must be unique in each Term
- •Ask the user to Insert the question in the first available space (number) or at the end (next number available).
- •For Multi-section and Cross-Listed Courses, find the first "common to all" available number.



The KEY is the NEW Question ID Format



2018-1-1-1-PU/ME/ME/AS-30000450/30000342/30000334/30000482-x-x-ANA 612/PGY 612/GRN 612/BIO 612-001-1-1-2

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Let's see the App





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