

SWEN303

PeerWise

**Name: August Bolter Student
ID: 300456915**

**Name: Nyle Ongi Student ID:
300458315**

Updates

We did not update any of the personas and use cases in this assignment as we did not receive little feedback for these sections in the last assignment and we got high marks. So, the description, personas and use cases are copy-and-pasted from assignment 1.

Description – PeerWise

Existing Solutions

There are a number of systems that are similar to PeerWise like Kahoot, GoSoapBox, and Wooclap.

All these services have a large sign up/sign in banner at the top of their home page so that it's the first thing that you see when you first visit the website. Below this they show people that have used their service. Each persons' demographics and occupation are shown as well therefore, people visiting the website find it easier to identify whether they would use it since they can see if they are similar to the userbase. There are also quotes from these users explaining their positive experiences with it. This means visitors of the site will be more likely to use it.

These services are similar to PeerWise because each one is catered for students and teachers. They all innovate traditional learning and make learning more interactive and fun for the students. They also have a much more streamlined registration page and have a tutorial on how to sign up. For example, GoSoapBox and Kahoot has a guide on how to get started right after signing up while PeerWise doesn't. Each service also has a quicker way to register because the username, password and email fields are all on the same page. In comparison to PeerWise where you need to enter your school/institution, click on the register link and then the fields for each registration detail (username, password, course ID and identifier) are shown on separate pages. In particular, the most inconvenient aspect about PeerWise's registration is that you can only find out your course ID and identifier from your course coordinator.

These services also follow a minimalist design, reducing the amount of text shown on the screen to make sure the user is not overwhelmed with information. And each given text is isolated from other nearby text via a border or container which helps the user to take the information in at a good pace. This is shown in Kahoot's home page after you login. These services also are more preferable to PeerWise in terms of creating a question or quiz. Take Wooclap for example, their way of creating questions and quizzes gives the user more freedom to customize questions and quizzes since they can have more multiple choice answers than PeerWise which only has 5 at a maximum. Wooclap, unlike PeerWise, allows questions to be in different formats such as polls, open questions, fill in the blank questions etc. These formats are presented in a drop-down list making it convenient for the user to change the format of their question.

Business Objectives

PeerWise is a tool instructors (secondary school teachers or university course coordinators) use to set up courses which students can join. Students can then create questions which other students can answer. Additionally, students can rate questions once they have answered them and can filter questions by their topic. They can also start quizzes which are an assortment of questions they have already answered. All these features contribute to PeerWise's purpose which is to encourage student collaborative learning to ensure that the students have a deeper understanding of the course material.

The problem with PeerWise is that it has an outdated and inconvenient interface. This is shown by the registration process which has a page for each registration step. The login process is also inefficient as you have to enter in your school/institution before being able to log in. Visually PeerWise also looks outdated and unappealing when compared to modern services/products. This is because of its outdated icons, lack of stylisation and basic backgrounds.

To solve this issue a modernised interface and design is needed. Having this will make it easier for students to use PeerWise and they will be more incentivised to continue using it in the future. They will also be more likely to recommend it to family and friends. This will lead to a larger user-base that has more returning users (users that revisit PeerWise). It will also help with the key business objectives of PeerWise (listed below):

- Instructors can facilitate collaborative student learning through course creation and activation
- Students can have a deeper understanding of topics by explaining and discussing questions and their answers
- PeerWise has an easy-to-use, convenient and modernised interface and has an aesthetically pleasing design

Importance to StakeHolders

PeerWise is important as it gives students another way to learn course material. If students keep learning in the same way they are more likely to become demotivated and unenthusiastic about learning so they will find it harder to take in course material. This might lead them to submitting lower quality assignments/projects and/or performing worse in exams. PeerWise is also important because it allows students to learn from each other and they can give each other different views and opinions on topics which they may not have thought about. This results in a much deeper understanding of the topic.

PeerWise also helps teachers because it ensures that students aren't relying solo on the teachers perspective of the topic. Having only one perspective of the topic can potentially create biases and can limit how well students can comprehend the material. This in turn may affect the students grades therefore it should be avoided.

This also alleviates some of the teachers and professors workload by getting the students to help each other on topics that they are confused about, and the teacher won't need to spend their time helping each troubled student individually. This means that teachers will be able to teach more topics to the students and/or dive deeper into the topics they are already teaching.

Model Overview

Persona Model Process

Creating our persona model was a complex process and consisted of many steps. These steps were:

- Analysing the GenderMag persona generation technique. Though we did not directly use this technique some of our sections in our Persona were inspired from it like Background, Skills, Demographics and Motivations. GenderMag also taught us that including a photo of the person the persona is representing is a good idea.
- Reading pages 61 to 70 from the book “About face: the essentials of interaction design”. This material helped us develop a deeper understanding of personas and the process of creating personas. This is because it covered important information like the usefulness of personas, how to create a realistic persona and the preliminary steps to create personas such as research.
- Doing further research by reading online articles and watching informative videos helped us come up with more persona sections which were goals, needs and expectations,
- Now that we had clearly defined our personas structure, we defined the scope of people that would use PeerWise which is any gender, ages ranging from 15-50 and their occupation being a secondary school student, a secondary school teacher, a university course coordinator/lecturer or a university student.
- From here we split the userbase based on a key, defining trait which is their occupation, we did this by having each persona represent an occupation. Then we made sure both genders were represented by having three male personas and one female and we determined the age of the personas based on the most likely age of someone in their occupation.
- After determining the persona's demographics we focused on giving them traits, goals and aspirations, a realistic photo, detailed backgrounds, strengths and weakness (shown by their skills) and other information defined by our other sections. When creating the personas, we always tried to make them unique and significantly different from each

other to cover a wider range of the userbase.

- Once we established all of our personas details we looked online for tools that could help us make and stylise these personas. We found UXPressia (www.uexpressia.com) which is a fantastic tool because sections that are common to find in personas like background, motivations etc. can easily be added and to the persona. Additionally, custom sections can be added as well. These sections can be rearranged and text formatting options are available as well. The best part about this tool is it made our personas look very stylish.
- When we used this tool to make our personas, we included sections we already agreed on having (e.g. Background, Skills, Demographics etc.) but we also used pre-defined sections it had (Frustrations, Quote, Challenges and Context/Environment). We did this because we felt these additional sections made our personas more realistic and believable and strengthened the connection between them and PeerWise.
- All the personas we created were included in our persona model and we decided to focus on all of these personas in the rest of the report because each persona represents an important part of the userbase and gives a good coverage of the system requirements.
- Next we had to determine what tasks the personas would perform when using PeerWise. We figured the best way to do this was to put ourselves in our personas shoes and use PeerWise. We created accounts via registration, joined the SWEN303 Course and used all of PeerWise features and functionality. We broke these features and functionality down into individual tasks and looked at the relationship between these tasks. From there we represented these tasks with their relationships to each other in the persona model.
- We focused on most of the tasks shown in our persona model as these tasks represented critical and/or necessary features/functionality that is used quite frequently. We didn't choose to focus on the task "logging in" in the rest of the report as we considered this task to be too small to be a standalone use-case scenario so instead we included it as an instrumental task to another one of our use-case scenarios ("starting a quiz on mobile"). Account is just an entity representing the users account, it is not a task, so there is no need to analyse it. We also decided to not focus on the task "changing from mobile view to desktop view", since desktop view is the default view. Some of the use-case scenarios we focus on later in the report have multiple tasks (these tasks are shown in the persona model) either because they are very small on their own or they are naturally related to each other. For example, we have a use-case scenario where the user answers a question and rates the question because a user can only rate a question after they answer it, so these two tasks are inherently linked.

Prioritising the tasks

We prioritised the use case scenarios by looking at how critical they were to the systems functions and also factoring in the purpose of PeerWise. For example, to be able to use the majority of PeerWise's functions the user needs to register for an account. Therefore registration is quite an important use-case scenario however, it is not the most important because it does not fit the purpose of PeerWise. This is because users are not visiting this service to register for an account, they are here to further their learning by creating questions and answering questions.

Those that are less critical to the systems functions would be less of a priority especially if they are not directly affecting the purpose of the system. Viewing badges is a good example of this because though it does incentive users to keep using PeerWise viewing badges doesn't match the purpose of PeerWise and if badges were to be removed from PeerWise the system would still be able to function perfectly fine.

We also took into account how frequently each user would perform the task/use-case scenario. For example, the act of giving feedback has a low priority since most users won't bother providing feedback because they do not feel the need to (they have no major issues with using PeerWise). So, scenarios that have a higher chance of occurring like creating or editing a question have a higher priority. Frequency was determined by how many people interacted with the task. For example, the viewing leaderboards task was only done by those who were interested of the statistics in the course.

Personas (from most important to least important)

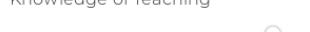
August did this persona

NAME	TYPE
Sarah Jones	Artisan
	Goals <ul style="list-style-type: none"> • Sarah would like to find someone to spend the rest of her life with • She also would like to produce a piece of art that is nationally recognised
Demographic	Quote <p><i>“Everyday I wake up aiming to be the best version of myself, whether that be artistically, socially or through teaching.</i></p>
<p>Female 42 years</p> <p>Dunedin, New Zealand</p> <p>Single</p> <p>Bachelor of Arts Course Coordinator</p>	Background <p>Sarah was born as an only child in Dunedin and has lived there her whole life. Her dad was a carpenter while her mum was an electrician. When Sarah was growing up they both spent a lot of time working resulting in Sarah having a lot of time to herself. She spent this time daydreaming, sketching and drawing. This soon became her passion and years later she completed a Bachelor of Arts degree at Otago University. She initially worked as an independent artist but she soon returned to Otago University to become a course coordinator in some 2nd and 3rd level Bachelor of Arts papers. She has worked there ever since, immensely enjoying watching her students grow. In her free time she still likes to create art and also enjoys playing tennis at the local tennis club.</p>
Skills	Motivations <p>Sarah has not used Peerwise yet but now would like to become an instructor on Peerwise so she can create and activate Peerwise courses for the art courses she teaches. She believes the tool will be a great way for her students to actively engage with each other and it could help them develop a stronger grasp of the course material.</p>
<p>Creativity</p>  <p>Patience</p>  <p>Initiative</p>  <p>Leadership</p> 	Frustrations <ul style="list-style-type: none"> • When a product/service is buggy • When the interface for a product/service is confusing due to bad design
Challenges	Needs <ul style="list-style-type: none"> • Peerwise's interface is easy to use • Peerwise registration is easy for her and her students • There is an easy, convenient way to give her students access to the courses she creates
Expectations	Context/environment <p>Sarah is relaxing with some wine after a long day at work. She is browsing the internet on her phone and comes across Peerwise. After doing further research she becomes excited by the prospect of using it for her courses and is keen to announce it to her students in the next lecture she teaches.</p>
	Technology 

August did this persona

NAME Hans Van Dijk	TYPE Guardian
	
Demographic <p> ♂ Male 24 years 📍 Wellington, New Zealand Single Student \$15000 </p>	Goals <ul style="list-style-type: none"> He wants to become a high-profile civil rights attorney. He wants to always be a positive influence for his friends and family.
Skills <p> Attention to detail  Reading Comprehension  Computer Proficiency  Listening  Work ethic  </p>	Quote <p><i>I want to make my parents proud by becoming the best lawyer I can be</i></p>
Background <p>Hans was born in Rotterdam, The Netherlands, but moved to Wellington when he was 18 to study in New Zealand. He currently is a third year student studying a Bachelor of Laws at Victoria University. Even in his first years of high school Sam has dreamed of becoming a lawyer, taking inspiration from his parents since his mum is a criminal defense lawyer and his father is a divorce lawyer. He looks up to his older sister who is employed as an indoor architect. Hans currently works at The Warehouse Lyall Bay part-time on weekends to earn income. For additional income he tutors 2nd year law courses at Victoria University. He already uses Peerwise multiple times a week and sees immediate benefit from doing so.</p>	Motivations <p>Hans uses Peerwise for understanding course content by answering other students questions and completing quizzes. He also uses Peerwise to help students in the courses he tutors by creating questions for test/exam revision.</p>
	Frustrations <ul style="list-style-type: none"> When a course isn't represented/available on Peerwise When services he signs up for sends him unnecessary emails
	Challenges <p>Hans poor listening can often lead to him missing what is being said in lectures resulting in him asking his friends for notes and/or help.</p>
	Expectations <ul style="list-style-type: none"> Peerwise is easily accessible at all times Peerwise is a secure, safe website
	Technology 
	Needs <p>That questions on peerwise can be filtered by topic, or specific questions can be searched.</p>
	Context/environment <p>On his morning bus commute Hans visits Peerwise on his phone, creating questions with detailed explanations to help other students.</p>

Nyle did this persona

NAME	MARKET SIZE	TYPE
Matthew McDonnel	 40 %	Rational
	<p>Goals</p> <p>Wants to take his two kids and wife out on a holiday in Japan. Wants to create a variety of way that students can learn or help memorize information covered in his class</p> <p>Quote</p> <p><i>I want students to be exposed to more ways in learning rather than taking notes on what's written on the blackboard and memorizing them before a test.</i></p>	
<p>Demographic</p> <p>Male 31 years</p> <p>Auckland, New Zealand</p> <p>Married</p> <p>Teacher</p>	<p>Background</p> <p>Matthew is a teacher at a King's College in Auckland. He is married to his wife and has two children, a six year old and a five year old. Mathew graduated from the University of Auckland and has a Bachelor of Education (Teaching). Mathew has great passion in teaching the younger generation.</p>	
<p>Skills</p> <p>Computer Proficiency:  100</p> <p>Knowledge of Teaching:  100</p> <p>Time Management:  25</p> <p>Work Ethic:  80</p>	<p>Motivations</p> <ul style="list-style-type: none"> Easy to setup. Students can create their own questions and share them with their classmates. Works on various platforms. <p>Challenges</p> <p>Matthew has poor time management skills so he struggles trying to create time to spend with his family and trying to spend his time working. Having a service that helps mitigate this challenge would relieve him from having to neglect his own children and possibly jeopardize his marriage.</p> <p>Technology</p> 	<p>Frustrations</p> <ul style="list-style-type: none"> Dated interface. Need to register an account. Need to create a course for students to allow students to create questions. <p>Needs</p> <ul style="list-style-type: none"> A way to give variety in learning methods. A tutorial or guide to help use and utilize the many features of the service. <p>Expectations</p> <p>A reliable tool/service that is quick and responsive. An easy way for students to achieve collaborative learning.</p> <p>Context/environment</p> <p>Matthew is at his office thinking of new ways that students can learn. It's after school and he has just finished marking assignments. Since PeerWise was originally made in Auckland, New Zealand he already had prior knowledge of its existence but didn't really have an idea of how it worked. He looked at the home page of PeerWise on his laptop and saw good reception of the website. So he thought that this service would be helpful to his students.</p>

Nyle did this persona

NAME	MARKET SIZE	TYPE
Ryan Olsen	 10 %	Idealist
	Goals Wants to enroll in Victoria University of Wellington	
	Quote <i>"I believe our generation should aspire to follow their ambitions and try to aim for the moon, so that even if they miss they land among the stars."</i>	
	Background Ryan is a year 13th student at Wellington College. He is very active in playing basketball as his extra curricular activity and plays it in his free time and during games at Friday night. He aspires to enroll in Victoria University of Wellington because its close to his home city and doesn't have to commute that far. He has an idea of what college to enroll in but doesn't have a clear idea in what to major in. He gets along with most of his classmates usually with his basketball teammates but he works well together with other people that he hasn't spoken with very much.	
Demographic Male 17 years Wellington, New Zealand Single Student	Motivations <ul style="list-style-type: none"> An innovative way to help students understand the material. Quick and easy to learn. Share solutions to complex questions with other students. Works on multiple platforms. 	Frustrations <ul style="list-style-type: none"> Interface is hard to look at both in the desktop version and the mobile version. Needs to wait for the course coordinator to register their course for student to create questions.
Skills Computer Proficiency  Time Management  Work Ethic  Social Aptitude 	Challenges Ryan finds it difficult to focus on listening to the teacher talk for an hour. His mind loses track of what's going on in class when the topic doesn't interest him. So when the next class eventually comes he gets lost because he didn't remember what happened in the previous class.	Needs <ul style="list-style-type: none"> A clean, easy to read and understand interface. A streamlined registration
	Technology 	Expectations <ul style="list-style-type: none"> A tool that will help me share information with my classmates to difficult questions. Their school to be register in the database to allow student to register for a PeerWise wise account.
	Context/environment Ryan is registering for a PeerWise account. He is on the couch in front of the TV in his house. He has just finished eat dinner with the family.	

Justification of persona ranking

Sarah Jones (written by August)

Students are unable to use any of PeerWise's features without joining a course. Courses are created by instructors (course co-ordinators or secondary school teachers). So, heavily prioritising the group of people that allow other parts of the userbase to use the service is necessary. Sarah's expectations for PeerWise also matches one of PeerWise's business objectives which is to have a modern design and to look aesthetically pleasing.

Hans Van Dijk (written by August)

University students (and to a lesser extent university course coordinators) make up most of the userbase. This is shown when you search for a school/institution on PeerWise since only a small fraction of New Zealand secondary schools shows up, proving that most secondary schools don't use PeerWise. On the other hand, when you search for a New Zealand tertiary institution it will always come up. Also, as a tutor he has another important use for the system which is helping the students he tutors. He also has expectations for PeerWise that facilitate good design, such as PeerWise being a safe, secure website.

Matthew (written by Nyle)

Matthew is a secondary school teacher and is looking for a better way to help students learn the material he teaches in his classes. Like with Sarah, the students are reliant on the teachers to use the service so secondary school teachers are more important than secondary school students. Matthew also has trouble with managing his time so using this service will help decrease his workload because he won't need to attend to each individual student when they require assistance, by letting other students help each other.

Ryan (written by Nyle)

Ryan gets lost easily in class and using this service would help him understand the material that he missed out on or that he doesn't really quite get. This persona is the least important because secondary schools take a smaller fraction of the user base and are reliant on other parts of the user base to make use of the service.

Scenarios and Use Cases (from most to least important)

#1 Creating a question (created by August) – Hans, Ryan

User Intention (assuming the user on the questions page)	System Requirements
Selects create new question option	
	Display new page with a question title field, answers field, explanation field and topic options

	Display preview or save as draft options
User fills in fields, selects which answer is correct and picks a topic.	
User chooses save as draft option	
	Display created questions page with option to edit draft
User chooses edit draft option	
	Display the draft
	Display preview or save as draft options
User edits a field and chooses display as preview	
	Shows preview of question
	Shows make changes and save question options
User chooses save question option	
	Goes back to showing all the questions the user has created

#2 Answering Questions and Rating Questions (created by Nyle) – Hans, Ryan

User Intention	System Requirements
Navigate to unanswered questions page	
	Show all unanswered questions
Choose a question	
	Show the question page
Choose answer	
	Show chosen answer page consisting of the answer field, explanation field, topic field and comment field

Choose to write/update an explanation	
	Publish explanation and update the chosen answer page
Choose to write a comment	
	Publish comment and update the chosen answer page
Choose difficulty rating of the question	
	Highlight choice
Choose quality rating of the question	
	Highlight choice
Submit rating and return to question list or go to a random question	
	Show question list page or show random question

#3 Course Creation and Course Activation (created by August) – Sarah, Matthew

User Intention (Assuming they have an instructor account)	System Requirements
Chooses “Create a new course” option	
	New page is displayed which has a Course name field
Enters and submits a course name	
	Display page asking user to confirm that course details are correct
User confirms course details	

	Home page is displayed showing the newly created course with its Course ID and an option to activate the course by uploading student identifiers
User chooses activate course option	
	Shows identifiers field and a field for a text prompt that gets displayed when students need to enter their identifier for a course
	Show “update identifier list and prompt” option
User enters identifiers in identifiers field and edits the text prompt field	
User chooses update identifier list and prompt option	
	Shows update message and returns to the identifiers & prompt page

#4 Requesting an instructor account (created by Nyle) – Sarah, Matthew

User Intention	System Requirements
Request an instructor account	
	Show the instructor account registration page

Enter in name, username, work email and institution/school	
Submit	
	Send code to email address to verify account creation
	Show code verification page
Enter code	
	Show request completion page

#5 Registering a student account (created by August) – Hans, Ryan

User Intention	System Requirements

Enter school/institution	
	Show PeerWise welcome page with login fields and the registration link
Navigates to registration page	
Begins registration	
	Shows username page with username field
Enters username	
Submits username	
	Checks password is valid
	Shows password page with password fields
Enters password	
Confirms password	
Submit password	
	Check passwords match
	Shows course ID page with course ID field
Enters and submits course ID	
	Checks course ID is valid
	Shows identifier page with identifier field

Enters and submits identifier	
	Checks identifier is valid
	Shows home page

#6 Editing questions (created by August) – Hans, Ryan

User Intention (assuming they have created a question)	System Requirements
Navigate to questions page	
	Show a list of user's created questions
Selects a created question	
	Shows question statistics and details like the title, answers, explanation etc.
	Shows edit question option
Chooses edit question option	
	Shows editable fields like title, answers, explanation, topics
	Shows preview option and draft option
Edits these fields	
Previews edited question	
	Shows preview

	Shows “make changes” and “save question” options
Saves question	
	Goes back to showing all the questions the user has created

#7 Deleting questions (created by Nyle) – Hans, Ryan

User Intention	System Requirements
Navigate to user’s created questions	
	Show a list of user’s created questions
Choose a question	
	Display new page with a question title field, answers field, explanation field and topic options
Choose to delete the question	
	Show warning to alert the user of deleting the question
User chooses to delete the question	

	Delete the question from the database and show the user's questions page
--	--

#8 Quiz on mobile (created by Nyle) – Hans, Ryan

User Intention	System Requirements
Selects institution/school from drop-down list	
	Show login page with login fields
Enters in username and password	
	Checks that the username and password is in database
	Show home page

Choose to change view from desktop or mobile	
	Switch view from desktop to mobile
Start a quiz	
	Show quiz page with the quiz categories
Choose a valid category	
	Show 1st question
Choose an answer	(Repeat until the end of quiz)
	Show result and answer
Proceed to next question	
	If final question then show results page otherwise show next question (Repeat until the end of quiz)
Chooses to log out	
	Logout the user and show login page

#9 Verifying email address (created by Nyle) - Hans, Ryan, Matthew

User Intention (assuming they are logged in and are on the home page)	System Requirements

Navigate from home page to email verification page	
	Show the email verification page
Enter email address	
	Send the verification code to the given email address
	Shows verification code page
Enter verification code	
	Check if verification code matches
	If not matching then alert the user that the code provided was incorrect
	If code matches then show the home page

#10 Resetting password (created by August) - Hans

User Intention (assuming they have verified their email address)	System Requirements
Navigate from home page to change password page	
	Show change password page with password fields
Enters password	
Confirms password	
Submits password	
	Changes user password
	Displays home page

#11 Filtering Question (created by Nyle) - Hans, Ryan

User Intention	System Requirements
Navigate to one of the questions page	
	Show a list of questions
Choose to filter out the questions	
	Show a list of topics
Choose one topic	

	Update list and only show questions related to that topic
--	---

#12 Joining a Course (created by Nyle)- Hans

User Intention	System Requirements
Join a course	
	Show join course page
Enter course ID	
	Check if course ID is valid
	If not alert the user of invalid course ID
	If valid show identifier page
Enter identifier	
	Check if identifier is valid
	If not alert the user of invalid identifier
	If valid show home page

#13 Provide Feedback (created by Nyle) - Sarah, Matthew

User Intention	System Requirements
----------------	---------------------

Choose to provide feedback	
	Show feedback page
Enter feedback	
Choose to remain anonymous	
Submit feedback	
	Show appreciation for feedback page

#14 Viewing leaderboards (created by August) - Sarah, Matthew

User Intention	System Requirements
Navigate to leaderboards page	
	Calculate leaderboard data/statistics for the course
	Show leaderboard page, consisting of sections such as Highest Reputation Scores, Highest Answer Scores, Top Rated Questions

#15 Viewing badges (created by August) - Ryan

User Intention (assuming they are logged in and are on the course page)	System Requirements
Navigate to badges page	
	Show badges page, consisting of: Basic badges, Standard badges, Elite badges and badges earned compared to other students

Justification of Use Case Ranking

#1 Creating questions – Written by August

The core functionality of PeerWise is built around questions and the users interaction with them. The key point of PeerWise is for users, primarily students, to use it as a tool for learning and revising course content. This is achieved through answering quality questions (questions that have detailed explanations and realistic answers). However, users only have the ability to answer these questions if there is functionality in place for creating the questions. Therefore creating questions is the most important use-case scenario for PeerWise.

#2 Answering questions and rating questions – Written by August

As mentioned in the ranking explanation for the “Creating questions” use-case scenario, users learn and revise course content (the purpose of PeerWise) through answering other users' questions. Another way of revising course content is by completing quizzes however, the quizzes are generated based on the questions you have already answered and there is a requirement of answering 10 questions to start a quiz so, answering questions is still the main way of achieving the purpose of PeerWise. Rating questions, another feature of PeerWise, allows for user-based moderation of questions and can help identify good or bad questions.

#3 Course Creation and Course Activation – Written by August

Being able to create and activate courses is another key piece of functionality for PeerWise. All the other main functionality of PeerWise is dependent on course creation and activation. This is because to register for a standard account you must join a course and registering gives you access to all the other features/functionality of PeerWise. Activating a course by setting identifiers for the course is equally as important as creating it or else other users will not be able to join the course (since they do this by submitting their identifier). Course creation and activation is particularly important to course co-ordinators/secondary school teachers as this will be the main feature they will use.

#4 Requesting an instructor account – Written by August

As mentioned in the previous ranking justification users can't do many tasks until they have registered for the website. For instructors to register they have to request an account first. Instructor accounts have the ability to create and activate courses while other (standard) accounts do not therefore the registration for instructor accounts is more important than the registration for standard accounts.

#5 Registering a standard account – Written by August

Registering a standard account is still important as most users using PeerWise will have a standard account. Requiring users to have an account gives each user an identity and allows data such as questions they have created, questions they have answered and statistics to be linked to their account, so the process of making an account is critical.

#6 Editing Questions – Written by August

Another task users can do is editing questions. This is important because users will often edit their questions for reasons such as fixing grammatical errors, improving explanations, making the question title clearer etc. Editing questions is more important than deleting questions because users are more likely to edit a question than delete a question. Also, editing a question often is more preferable than deleting it as the information linked to the question (like statistics on what user chose what answer) will not be deleted as well.

#7 Deleting Questions – Written by August

PeerWise allows users to delete questions that they have created. This feature is fairly important because it allows users to remove their questions if they have made a significant mistake (e.g. the question isn't appropriate for the course). Deleting questions also allows old, outdated questions to be removed which helps the course question page become less cluttered, making it easier for students to find questions they'll find helpful.

#8 Quiz on mobile – Written by Nyle

This is an important use case because this allows users to use PeerWise on mobile which means PeerWise is a lot more accessible and convenient as they can use it while they are on the move (e.g. travelling/commuting). In this age where the majority of people own a smartphone this use case will be relevant to most of the user base. Creating quizzes makes it easier for students to answer multiple questions in a row and it is a convenient way for them to revise all the content they have learnt from PeerWise.

#9 Verifying email address – Written by Nyle

Verifying the user's email address is an important use case because it allows a safe, secure way to send the users password in case the user can't access their account because they've forgotten their password. If the user has verified their email then the service can safely send the instructions to reset their password via email so that the user can access their account.

#10 Resetting password – Written by Nyle

This use case is important because people often forget their passwords. People likely care more about their security rather than their convenience. Therefore, they use a long password that is hard to remember rather than a short password that is easy to remember and is easy to crack. This is more important than the use cases below because a password is essential to be able to access your account, and an account is essential to use PeerWise

#11 Filtering questions – Written by Nyle

This use case is only important when there is a lot of questions that have been created for the course and it will only apply if PeerWise is heavily used. But when the questions list is only one or two pages the user can just read the question titles instead. This would only be frequently used when there is large participation within the course and would only suit users that like to find questions quickly. It is more important than the use cases below because it does offer a way to make the service more convenient for some users.

#12 Joining a course – Written by Nyle

Joining a course is a use case that will only be used when the user has more than one university course/secondary school subject that uses PeerWise. This is unlikely to be the case for most people unless the service is heavily used within the institution. Even if the user has multiple courses to join, they (university students) would likely only use it 1-3 times every trimester. So, this scenario is not very frequent.

#13 Provide feedback – Written by Nyle

Providing feedback is helpful to PeerWise but it is not vital. Users also have been given an alternative option for providing feedback that is likely more convenient to them which is Twitter so, having a feedback interface created within the system is less important and will likely be less used in comparison to the alternative. Even if this is used people will most likely only give feedback once.

#14 Viewing leaderboards – Written by Nyle

This is one of the least important use cases because this is not what the purpose of the service (PeerWise) is for. Those who are more competitive will be more enthusiastic about using PeerWise since they have a direct way of comparing themselves to their peers, but it will not be the reason to why they're using this service. This use case will only help keep users using the service while they actually fulfil the main reason for visiting this website which is to answer and create questions to help with their learning. Also, the only users that will view this interface would be teachers and students that are competitive/care about statistics.

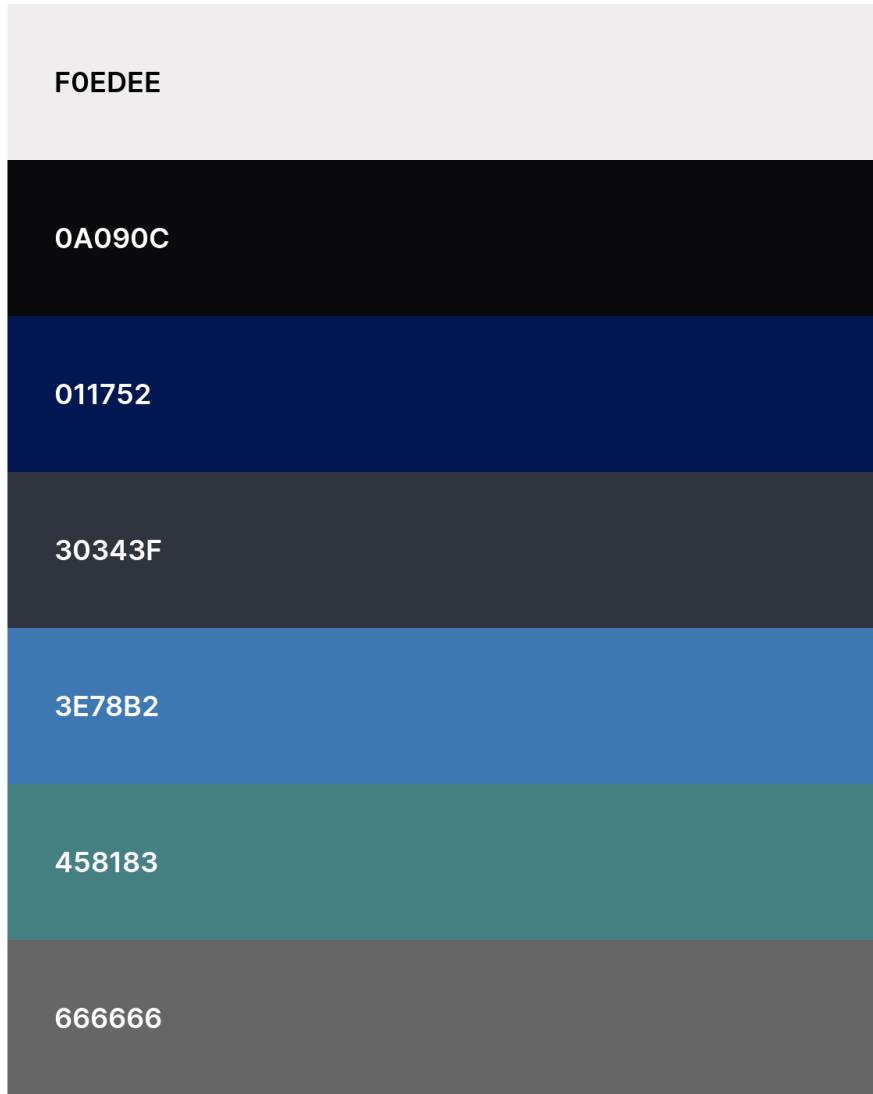
#15 Viewing badges – Written by Nyle

Viewing badges is the least important use case because they are not essential to the core purpose of the website. They do provide the users with some degree of satisfaction when they are given a

badge for completing a task. But since the user base is related to universities and secondary schools, they are not focused on acquiring badges but rather learning material that has been covered in their classes therefore, very few people would be involved in this scenario.

Design

Colour Palette



We decided to have a fairly similar colour scheme to the colour scheme of PeerWises' old design (blue, white and grey) so users would be able to adjust to the new colour scheme quicker

however, we added in teal to add a bit of variety. Though we use all colours quite a lot the primary colours are white (FFFFFF) and a medium blue (3E78B2). We use the teal (458183) sparingly and black (0A090C) is used a lot. The greys are used occasionally, mainly for highlighting/indicating when a user is hovering over a component. We also chose to include a navy blue colour as this colour is often used in business/professional websites.

Fonts in Balsamiq

We made all our designs in Balsamiq which doesn't have the ability to choose different fonts so all our text has the 'Comic Sans' font unfortunately. If we were using a different tool we would use multiple (and better) fonts.

Balsamiq Wireframes

All our wireframes can be found in our Balsamiq file in our gitlab repository (<https://gitlab.ecs.vuw.ac.nz/onginyle/swen303-assignment-2>)

Task Coverage and Persona Needs

We made designs for all use-cases (tasks) we defined earlier. However, we did not fully cover the 'quiz on mobile' use-case because even though we covered creating a quiz we did not cover doing it on mobile. The only difference between creating a quiz on mobile compared to desktop is the design would be suited for mobile devices. Apart from this minor part of one of our use-cases we have 100% task (use-case) coverage. Some of our designs don't relate to any use-case and that's because these designs are pages that are part of the structure of the website (therefore essential to cover) but aren't directly involved in any use-case. We also made sure to cater towards our persona needs by making the interface easier to use, removing unnecessary and confusing functions (e.g. users being able to change their answer after seeing the right answer) and made the website more colorful. We also made the website flow together smoothly by including a navigation bar and made PeerWise more aesthetically pleasing by having a more spacious layout.

Navigation Bar, Footer and Logo

All pages shown below have a banner and most also have a navigation bar and a footer. The banner includes PeerWise's new logo. I changed the logo because the old one was low resolution and did not fit PeerWise's new colour scheme and had an ugly WordArt reflection effect. The new logo still has resemblance to the old logo so the change is easier for users to take in. Below is a picture of the old logo so you can easily see the difference.



We chose black and white for our navigation bar and footer colours as these colours have high contrast and are neutral colours. The footer includes social media links to promote PeerWise and also has an option to change the view from desktop to mobile or vice-versa (with the current view being indicated).

PeerWise Homepage

Hans, Matthew, Sarah, and Ryan

This is the homepage of the website so this will be the first thing that users see. Since we need to create a good first impression our homepage needs to be eye catching and informative. The first

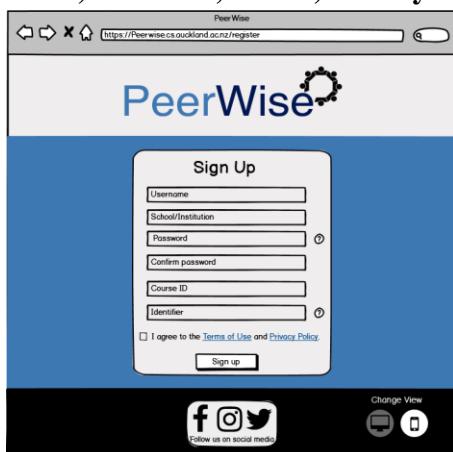
three sections of the homepage shows the user what PeerWise is and why use it. Each section is separated with a different colour, this will help the user's eyes focus on that section alone and their eyes won't wander off to the other sections. Users also need to scroll down to reach each section as the entire page will not fit in one screen. We used dark and cool colours so that the user can read the text without straining their eyes with a bright background. Allowing the users eyes to suffer less fatigue will help them read the information without interruption. The more information they get will help determine if they will use PeerWise or not.

After the information sections the user is then presented with a login or register section. This section allows the user to choose to either present their username and password to login, register a student/instructor account, or if they have forgotten their password choose to reset their password all in one page. Resetting passwords are common among websites that contain authentication functions, because many users tend to forget their passwords if they have multiple accounts with different passwords or their password is difficult to remember. This may apply to senior teachers that have difficulties remembering things.

Registering an account is vital to this web service because an account is required to make use of any of the website's features. The user can choose to either have a regular account or they can request for an instructor account. After the login/register section comes the customer reviews and the footer of the page. The customer reviews will mainly display positive reactions to promote this service. The footer of the page contains social media links and the option to switch between mobile and desktop view. There is also a message shown at the top of the homepage when a user applies for an instructor account.

PeerWise Register Page

Hans, Matthew, Sarah, and Ryan (Use-case #5)



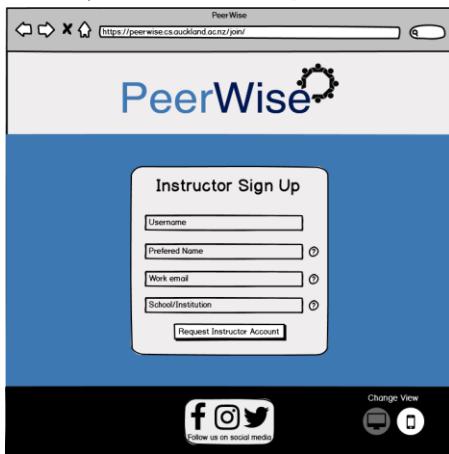
The registration page is kept simple and all the necessary registration fields are in one page. This will streamline the registration process so that users do not have to enter a new page for each field that they fill in. The fields for registration are username, school/institution, password and

confirmation, course id and an identifier. Users have a question mark button that they can click to get more information about the field. All the fields need to be filled in and then the user needs to check the box to be able to sign up. Since this is just one section, all that's needed is one background colour. We chose the light blue to keep a consistent pattern to the first colour below the logo.

We also added a requirement to click on a box to agree to Terms of Use and Privacy Policy before proceeding. This was originally not in our use cases. This page is more relevant to the student roles as they need an account to use the features of PeerWise. Teachers have another page to request for an instructor account.

PeerWise Instructor Register Page

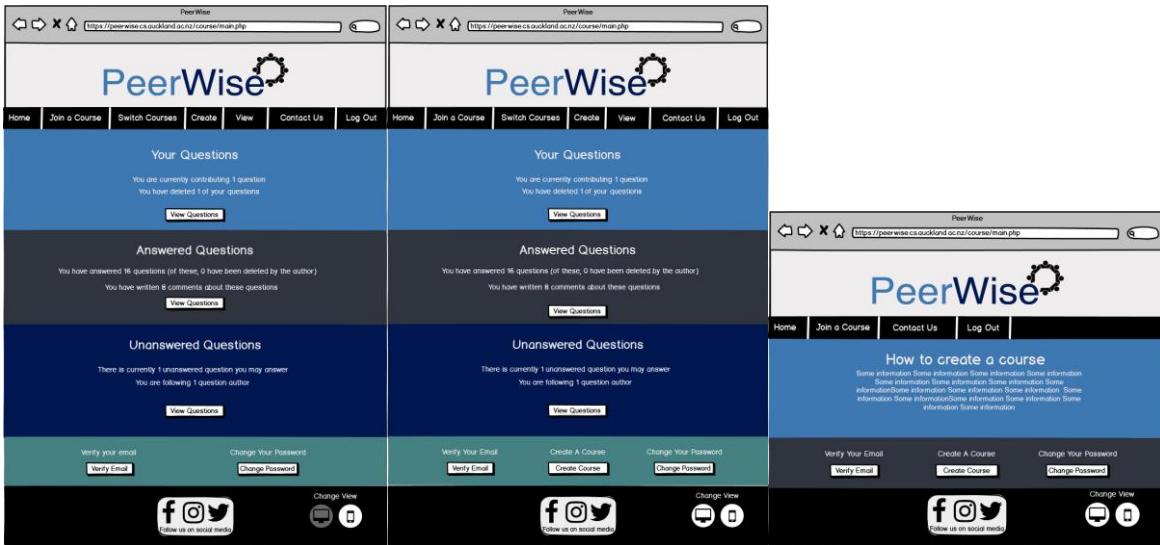
Sarah, and Matthew(Use-case #4)



This is similar to the registration page but this is only relevant to teachers and instructors. This allows teachers to request for an instructor account. This account has special privileges such as creating a course and activating a course for students to join. Similarly to the regular sign up page it has question marks to help users gain more information about the field.

PeerWise Logged in

Hans, Matthew, Sarah, and Ryan (Use-case #3, Use-case #9 , and Use-case #10)



This is the homepage when the user logs into their account. This page now has a navigation bar under the logo then four different sections. Three of the sections are related to questions and the fourth section is for verifying the user's email and changing their password. The three question sections are about the user's created questions, the user's answered questions and unanswered questions. This page follows the front page's pattern with having light blue, grey, dark blue then teal below the logo in that order. The three question sections also have a title, some information relating to that section followed by a button that leads to that page. The three sections fulfill both students and teachers' needs to access their questions. The questions sections are also centered instead of left or right aligned because users usually focus at the center of the page.

The instructor has a different page where they have an extra button to create a course for their students to join. If the instructor has not joined a course then they will be present with a different page without the question sections and showing only information on how to create a course. This is because if they have not joined a course they would not have any of the necessary questions to fill in the sections, so if they press the buttons to go to the answered questions page for example, it would only show an empty page. This page also has an altered navigation bar since the user is not in a course they get limited access.

PeerWise Answer Question

Hans and Ryan (Use-case #2)



This one of the core pages of the web service. This page still follows the pattern of light blue then grey for the relevant sections so that it keeps the entire website consistent. This page shows an instruction as the title followed by the question and the choices in the center of the page. This is center aligned because we want the user to have their whole focus on the purpose of the page. Then below that will show some statistics of the question if they are interested in that. White text is used to show contrast to the cool blue and grey colours. Black text is used to show contrast to the white colours.

This page also highlights the user's chosen answer in dark blue. This way the user can have an idea of what choice they picked. We change the highlight from green to dark blue because user's may assume that they chose the correct answer. This is because green invokes a positive reaction and due to this; users may not think about changing their answer. This has an inverse effect to the colour red where it invokes a negative reaction. Before they go to the results page they need to press the submit answer button. This gives the user a way to choose a different answer if they did not like their previous choice. This page can be used for both students and teachers but will be more relevant to students as they are more likely to ask and answer questions.

PeerWise Rating Question

Hans and Ryan (Use-case #2)

The screenshot shows a web browser window for the PeerWise platform. The URL is https://peerwise.cs.auckland.ac.nz/course/main.php?cmd=answerQuestion&id=4. The page title is "PeerWise". The navigation bar includes links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. Below the navigation is a section titled "Answer the following:" with a sub-section "Brain answer this?". It displays the user's answer "C" and the correct answer "B". A list of five options is shown with their respective percentages: A (1%), B (25%), C (25%), D (25%), and E (1%). Below this, a message says "The correct answer was: B". There are sections for "Explanation" (with "Request Help" and "Improve Explanation" buttons) and "Topics" (listing "Test Topic"). The "Comments" section shows a single comment from "Wise 2 days ago" stating "This is a proper comment." with a "Reply to this comment" link. Below the comments is a "Rate This Question" section with difficulty levels (Easy, Medium, Hard) and quality levels (Very Poor, Poor, Fair, Good, Very Good, Excellent). Buttons for "Report This Question" and "Follow This Author?" are also present. At the bottom are "Submit rating and return to questions list" and "Submit rating and go to a random question" buttons, along with social media sharing icons for Facebook, Instagram, and Twitter.

This is the rating questions page which will display after the answer question page when the user has answered a question. Just like the pages before white text on top of dark colours and black text on white colours. This page shows the result of the user's answer which indicates the correct answer with a green check mark and they would see a red cross if they chose the wrong answer. If the user chose correctly then they would only see the green check mark. There are percentages shown to the right of the choices which indicate what percentage were each answer chosen. Below the result section is the explanation of the answer and topics related to the question. In the explanations box contains a button to improve the explanation and one to request help.

Below that section has the comments section where both students and teachers can comment to the question or reply to each other. This section allows teachers to communicate with students and vice versa. There is also a page function in the comments section so when there is an overflow of comments they are pushed to the next page instead of deleted.

The rate section below the comment section contains a rating system that users utilize to give other users how difficult the question is and the quality of the question. They might also choose to report the question and/or follow the author of the question. If users choose to report a question, then the course creator will be notified and act accordingly by either choosing to delete the question or notify the author of the question. If the user chooses to follow the author then they would be shown their followed author's questions. The report this question and follow this author buttons have information below them that will assist the user of what the following

checkboxes do. Finally there are two buttons located below the rate section that indicate to the user to proceed to the next question or go back to the questions list.

PeerWise Quiz Results

Hans and Ryan (Use-case #8)

The screenshot shows a series of three quiz results from the PeerWise platform. Each result includes a 'Go to this question' button and a 'Change View' button at the bottom.

Question 1: Your answer was: C

A Answer 1	3 (16%)
B Correct Answer	✓ 5 (25%)
C Wrong Answer	✗ 4 (20%)
D Not This One	6 (25%)
E Pick This One	2 (10%)

The correct answer was: B

Question 2: Your answer was: A

A Answer 1	✗ 3 (16%)
B Correct Answer	✓ 5 (25%)
C Wrong Answer	4 (20%)
D Not This One	6 (25%)
E Pick This One	2 (10%)

The correct answer was: B

Question 3: Your answer was: E

A Answer 1	3 (16%)
B Correct Answer	6 (25%)
C Wrong Answer	4 (20%)
D Not This One	6 (25%)
E Pick This One	✓ 3 (16%)

The correct answer was: E

Follow us on social media: [Facebook](#) [Instagram](#) [Twitter](#)

After a quiz has been completed then it will display the results of all the questions. Users are given a red cross mark to indicate that their choice was wrong and a green check mark if for the correct answer. If the user got the question correct then they will not see a red cross mark. Text is also provided on the screen if the user would rather read the results. Below each result of the question has a button to go to the results page of that particular question.

PeerWise Verify Email, Enter Code and Change Password

Hans, Matthew, and Ryan (Use-case #9)

The image shows three separate browser windows side-by-side, each displaying a different page from the PeerWise website:

- Verify Email:** A text input field labeled "Email" with a placeholder "Enter your email address". Below it is a button labeled "Send Verification Code". A red box at the top contains the message: "You must provide a valid email address, because an email will be sent to the address you specify containing a verification code that will be required before your email address will be stored".
- Enter Code:** A text input field labeled "Code" with a placeholder "Enter the verification code". Below it is a button labeled "Submit Code". A red box at the top contains the message: "Please check your email, and find the verification code that has been sent to you. If you don't see it in your inbox, it will probably be in your spam folder. If you open a new browser window, check your email and copy the verification code, and then paste the code into the "Code" field below. Once you have done that, please press the "Submit code" button".
- Change Your Password:** Two text input fields labeled "New Password" and "Confirm New Password". Below them is a button labeled "Change Password". A red box at the top contains the message: "To change your PeerWise password, please enter your preferred new password in the fields below and press the "change" button".

Each window includes a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. At the bottom of each window is a social media follow section with icons for Facebook, Instagram, Twitter, and YouTube, along with a "Change View" link.

These pages are for users to verify and change their password. A text box is shown to give the user some more information about what to enter in the fields. The verify page would only be used once by a user since they only need to verify their emails once. Also users don't often change their passwords since it would only confuse them more if they have multiple accounts with different passwords. We added these if the user has a security breach and they had to change their passwords. Change password also has a confirmation and it will only allow the user to change their password if both fields are identical. This allows the user to make sure that their password is what they want it to be and they didn't make a mistake during the input. If we did not have the confirmation and they entered their password with a mistake this would create trouble when they inevitably have to log in and find out that they typed their password wrong.

PeerWise Join Course and Activate Course

Matthew, and Sarah (Use-case #3)

The image shows two separate browser windows side-by-side, each displaying a different page from the PeerWise website:

- Join Course:** A text input field labeled "Course Id" with a placeholder "Enter course ID". Below it is a button labeled "Join Course". A red box at the top contains the message: "To join a new course, you need to know the "Course ID" for the course. This information will usually be given to you by your course instructor. Please enter the "Course ID" below to join the course".
- Create a Course:** A text input field labeled "Course Id" with a placeholder "Enter course ID". Below it is a button labeled "Activate Course". A red box at the top contains the message: "To create a new course, you need to enter the "Course ID" for the course. This "Course ID" must be unique".

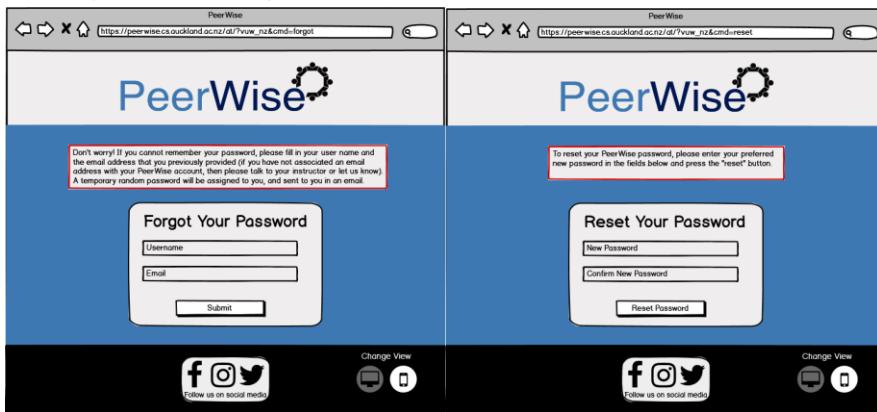
Each window includes a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. At the bottom of each window is a social media follow section with icons for Facebook, Instagram, Twitter, and YouTube, along with a "Change View" link.

These pages look similar to the others to keep consistency. They contain a box below the navigation bar which gives information to the user about what to enter in the fields. Join course is accessible through the navigation bar below the PeerWise logo and both students and teachers can use this, while the create course is only available to teachers. This fulfills the needs of students by being able to quickly join a course and immediately participating by creating questions and/or answering them. Creating a course allows teachers to separate their classes if they teach multiple classes. This way different courses with different course outlines don't

overlap in the same environment. If we had every course created by that teacher be grouped together then the questions that students will make will be focusing on a variety of topics instead of having a specified topic like software design.

PeerWise Forgot Password and Reset Password

Hans (Use-case #10)



These are different to the change password page as changing the password needed the user to be logged in. These pages are necessary for users that might forget their password. This could be busy students or teachers or even forgetful students or teachers. Whatever the reason may be users will forget their password at some point so having a way to reset it is essential to the success and longevity of a website. We want users to authorise and authenticate themselves before letting them reset their passwords so a link will be sent to their emails and if they have requested to reset their password if they did not they can ignore that email. It is the system's responsibility to be able to use a third party to confirm the user's identity otherwise another user can change the password of a different user.

PeerWise Badges/LeaderBoards

Matthew, Sarah, and Ryan (Use-case #14 and Use-case #15)

The screenshot shows the 'User Stats' page of the PeerWise website. At the top, there's a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. Below the navigation is a section titled 'Badges' with three categories: Basic, Standard, and Elite. Each category contains several badge icons with their names: 'Question author', 'Answerer', 'Star-crossed', 'Comment', 'Author reply', 'Followers', 'Reviewer', 'I'll be back' under 'Basic'; 'Helper', 'Popular question author', 'Discussed question author' under 'Standard'; and 'Good question author', 'Super scholar', 'Insight', 'Conversation', 'Genius', 'Leader', 'Existen', 'Legend' under 'Elite'. A mouse cursor is hovering over the 'Author reply' badge in the Basic section. Below the badge section are two bar graphs: 'Highest Answer scores' and 'Highest Reputation scores', each showing five bars for different users. Below the graphs are four tables labeled 'Top rated questions', 'Most questions answered', 'Most "agreed with" critic', and 'Most "followed" question author', each listing five users with their scores. At the bottom of the page are social media sharing icons for Facebook, Instagram, and Twitter, along with a 'Change View' link.

We decided to combine badges and leaderboards into one page as they have similar functions and that is to present the user's achievements and statistics. This page is a bit more different to the other pages in the website as it mainly shows graphs and tables. There are placeholders icons to represent the badges and when hovering over the box it shows a pop up of the badge description. The tables show the score of the top 5 users and represent the answer and reputation scores on a graph.

We also wanted to keep consistency but since this is such a different page we made the choice to break the pattern at the bottom section as we decided that having the teal colour would be more appropriate to represent the tables. We wanted to have two light colours then a dark colour between the two. If we had the dark blue next to the dark grey next to each other, then it wouldn't give as big of a contrast to split the two sections in comparison to a dark grey to a teal colour.

This fulfills the needs of teachers that want to see that are interested in wanting to know the statistics of their course. They can use this information to improve their lectures. Students can also make use of this page if they want to compete with other students. This will increase participation in the course as a whole and will therefore increase their learning.

PeerWise Quiz Creation

Hans, and Ryan (Use-case #8)

The screenshot shows the PeerWise quiz page. At the top, there's a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. Below this is a section titled "Start A Quiz" with several buttons for different quiz types. To the right, a box shows "Questions Available" with counts for each category. Below this is a "Quiz History" section featuring a line graph. The graph tracks the number of questions taken over time, with red for incorrect answers and green for correct ones. The x-axis spans from May 10 to July 15, and the y-axis ranges from 0 to 30. A legend at the top of the graph indicates that red dots represent "Incorrect" and green dots represent "Correct". Below the graph are social media sharing icons and a link to "Digg on which quizzes taken".

This is the quiz page, where users can start a quiz based on different aspects. This will display all the questions related to that aspect. Users cannot start a quiz if there are no questions available. Below the quiz section has the quiz history which displays the user's correct and incorrect answers on a line graph. Green is used to represent the correct answer and red to represent the incorrect answers. These colours were chosen because they invoke positive and negative emotions respectively.

PeerWise Feedback page

Matthew, and Sarah (Use-case #13)

The screenshot shows the PeerWise feedback page. At the top, there's a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. Below this is a "Provide Feedback" section. It contains a text area for users to describe features or problems, with a toolbar below it for rich text editing. There's also a checkbox for anonymous feedback and a "Submit Feedback" button. At the bottom, there are social media sharing icons and a link to "Follow us on social media".

This page is accessible to all users that wish to provide feedback to PeerWise. They can enter their feedback in the white text box and edit it using the tools located below. They can click the

box that allows them to send feedback anonymously if they don't want to be known. If users do this PeerWise will not know who to respond to if they have further inquiries about your feedback. It is part of the system's responsibility to give users the right to remain anonymous if they want to be. This is necessary for users that want to send feedback to help improve PeerWise.

View All Your Questions

Hans and Ryan (Use-case #11)

The screenshot shows a web browser window for the PeerWise platform. The URL in the address bar is <https://peerwise.cs.uckland.ac.nz/course/main.php>. The page title is "PeerWise". Below the title is a navigation menu with links: Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. The main content area is titled "Your Questions". On the left, there is a "Filter by Topic" dropdown menu with options: Any, Testing, and Maths. Below the filter is a table listing four user questions:

Question Title	Date Created	Last Updated	Number of answers	Help Requests	Most Recent Comment	Number of Comments	Difficulty Rating	Overall Rating
What is 2+2=?	27/04/2020 2:00pm	10/05/2020 6:00am	8	0	"Great Question!" - Nykie 10/05/2020 5:05am	9	Easy	3.61
First Question	20/04/2020 3:00pm	20/04/2020 3:00pm	4	0		0	Easy	4.25
Second Question	21/04/2020 3:00pm	21/04/2020 3:00pm	1	1	"Makes you think!" - Trevor 7/05/2020 2:15pm	1	Medium	4.00
Third Question	22/04/2020 3:00pm	22/04/2020 3:00pm	3	2	"Very difficult" - Tim 8/05/2020 8:25pm	2	Hard	3.00

At the bottom of the page, there are social media icons for Facebook, Instagram, and Twitter, with the text "Follow us on social!". There are also "Change View" and device icon buttons.

This page is to show the user all their questions in a convenient and compact way. In regards to the body of this page like in PeerWise original design I stored the users questions in a table with the table columns being mostly the same (removed 'your answer popular' column as it was unnecessary). To provide more information to the user I changed the most recent comment column to show the contents of the comment and the date rather than just the date. When the user hovers over a row it darkens so the user can easily see what row they are on. If they click on the row it will take them to the 'Viewing your question' page which shows details of the question.

PeerWises' old design had this functionality in a separate column called "Click to View" however, this design integrates the functionality into the table itself, providing a cleaner interface. This page along with the 'View All Answered Questions' page and the 'View all Unanswered Questions' page have an option to filter questions by topic. Currently the filter is set to 'Any' meaning questions with any topic are shown. If one of the other topics are clicked on then the table will only show questions that have that topic. This filtering function allows users to narrow down the questions they are looking for, it is especially useful when they are a part of a big PeerWise course with lots of questions. Hans and Ryan are the main two personas that would visit this page as Matt and Sarah aren't very likely to create questions, they are more likely to be monitoring students' questions.

View All Answered Questions

Hans and Ryan (Use-case #11)

Question Title	Author's reputation	Answered On	Result	Answer Again?	Number of answers	Help requests	Most recent comment	Number of comments	Difficulty Rating	Overall Rating
What year was COVID-19 discovered?	40	27/04/2020 2:00pm	Correct	→	15	3	*Name of virus given this question away - August 20/05/2020 8:00pm	4	Easy	4.14
Test question	60	20/04/2020 3:00pm	Incorrect	→	4	0		0	Medium	3.50
Test question #1	20	21/04/2020 3:00pm	Correct	→	9	1		0	Hard	3.78
Test question #2	80	22/04/2020 3:00pm	Incorrect	→	2	0		0	Easy	3.00

This page shows the user all their answers to questions created by other users. In this page I kept the same dark grey background, white table and white headings as the page 'View All Your Questions' and 'View all unanswered questions'. This is because the purpose of these three pages are similar and have a similar format of content therefore it makes sense that the colour

scheme/layout of these pages are consistent. When a user clicks on the row of this table it takes them to the details of their answer ('View your answer to a question' page). If the user clicks on the column 'Answer again' for one of the answer rows then it will take them to the page when the user can answer the question again ('PeerWise Answer Question' page). Though it is not ideal to have a column contain a link in this way, the row itself is already linked to the 'View your answer to a question' page therefore, this was the best way of including this functionality. Hans and Ryan would be the only two personas that would likely use this page as teachers won't be answering questions since they do not need to learn course/subject content as they are the ones who teach it.

View all unanswered questions

Hans, Ryan, Sarah and Matthew (Use-case #11)

The screenshot shows the PeerWise platform interface. At the top, there is a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. Below the navigation bar is the PeerWise logo. On the left, there is a sidebar titled 'Filter by Topic' with options for Any, Testing, and Maths. The main content area is titled 'Unanswered Questions' and displays a table of results. The table has the following data:

Question Title	Author's reputation	Date Created	Number of answers	Help requests	Most recent comment	Number of comments	Difficulty Rating	Overall Rating
test test test	6	10/05/2020 6:53pm	1	0		0	Easy	1.50
Test question	66	21/03/2020 2:34pm	4	0	"Good trick question" - Nathan 22/03/2020 6:27pm	1	Easy	3.50
Test question #1	22	20/03/2020 12:34pm	4	1		0	Medium	5.00
Test question #2	4	10/07/2019 10:32pm	4	0	"Extremely Hard" - Sarah 15/07/2019 5:24pm	1	Hard	5.00

At the bottom of the page, there are social media icons for Facebook, Instagram, and Twitter, with the text 'Follow us on social!'. There are also 'Change View' and device icon buttons.

This page is showing unanswered questions from any user. Like the two pages discussed above the table can be sorted (ascending/descending) depending on the columns content by pressing the small up/down arrow in the column header. E.g. Question Title is sorted alphabetically whereas

Author's reputation is sorted numerically. Most recent comment is sorted by date rather than alphabetically. Clicking on a row in the table takes the user to a page where they can answer the question ('PeerWise Answer Question' page). Storing this information in a table means it's easy for the user to identify different parts of the information and as mentioned just before, allows them to sort the information. All personas will use this page, Hans and Ryan so they can answer questions and learn course/subject content and Matthew and Sarah so they can see what kinds of questions students are submitting.

Viewing your answer to a question

Hans and Ryan

The screenshot shows a web browser displaying the PeerWise platform. The URL in the address bar is <https://peerwise.cs.auckland.ac.nz/course/main.php>. The main content area features a large blue header with the PeerWise logo. Below the header is a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. The main content area displays a question titled "What year was COVID-19 discovered?" under the topic "Health, General Knowledge". The question has three options: A (2018), B (Correct Option) (Your Choice) (2019), and C (2020). The results show that 4 users chose 2018 (26.67%), 7 users chose 2019 (46.67%), and 4 users chose 2020 (26.67%). Below the results is an explanation: "'2+2-1=3 quick maths' - Big Shaq". There are buttons for "Improve Explanation" and "Request Help". To the right of the question is a sidebar titled "Comments" containing four user posts:

- "Name of virus gives this question away" - August (Posted on 9th May 8:00pm)
- "Great question" - Nyle (Posted on 9th May 10:2pm)
- "Was discovered too late" - Mark (Posted on 8th May 12:00pm)
- "Excellent Question" - Mason (Posted on 7th May 11:05pm)

At the bottom of the main content area, there is a "Ratings" section with an average rating of 3.61 and an average difficulty of "Easy". It includes a table of quality ratings and their counts:

Quality Rating	Difficulty: Easy	Difficulty: Medium	Difficulty: Hard	Total
Excellent (5.0)	4	1	0	5
Very Good (4.0)	3	0	0	3
Good (3.0)	5	2	1	8
Fair (2.0)	2	0	0	2
Poor (1.0)	0	0	0	0
Very Poor (0.0)	0	0	0	0

Below the ratings is a "Follow Author" button. At the bottom of the page is a social media footer with icons for Facebook, Instagram, and Twitter, and a link to "Follow us on social".

This page shows the details of an answer the user has made in the past. Only Hans and Ryan would visit this page as students will be the only ones answering questions on the website. This page uses a lot of different colours to make the page exciting. The main changes (non-aesthetic changes) between this design and PeerWises' old design is PeerWises' answer table was very

confusing (see photo below) as a user likely won't know what 'First Answers' and 'Confirmed Answers' mean. So, the table only now shows the number of times an answer is chosen.

OPTION	ALTERNATIVE	FIRST ANSWERS	CONFIRMED ANSWERS
A	its michael jackson	2 (28.57%)	0
B	this assignment is hard	0 (0.00%)	0
C	pls help	2 (28.57%)	0
D	stay at home	3 (42.86%)	0

I also changed comments to not be anonymous to prevent 'internet trolls' abusing PeerWises' comment system. The comments section is a scroll feed so if the comments exceed the length of the section, then a scroll bar will appear. This means the user can see all the comments by using the scroll bar.

Creating questions

Hans and Ryan (Use-case #1)

The screenshot shows the 'Create Question' page of the PeerWise platform. The URL is <https://peerwise.cs.auckland.ac.nz/course/main.php>. The page features a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. A dark blue banner below the navigation bar contains the text "Please read the creating questions guidelines". The main content area is organized into several sections:

- Write Question:** A large text input field with placeholder text "Please write your question here...".
- Possible Answers:** A grid of five answer boxes, each containing a letter (A-E) and the word "Testing". Below each box is a small blue button labeled "Correct Answer".
- Explanation:** A text input field with placeholder text "Please provide an explanation for your answer here...".
- Topics:** A section with radio buttons for categories: General (selected), Testing, Design, and Music. There is also a "Create a new topic" button.

At the bottom, there is a "Submitting question" section with three buttons: "Show me a preview before submitting", "OR", and "Save question as a draft". Below this is a black footer bar with social media icons for Facebook, Instagram, and Twitter, and a "Follow us on social" link. On the right side of the footer, there are "Change View" buttons for desktop and mobile devices.

This is the page for creating questions, one of the most important functions of PeerWise. This page follows the colour scheme of PeerWise (shades of blue, cyan, grey, black and white). PeerWises' old design requires a lot of scrolling and has multiple paragraphs explaining what each section means. This is messy and overloads the user with information. So, the new design doesn't require scrolling and the information which can help the user create good questions have been moved to a separate window called 'creating questions guidelines'. A link to this window is included below the toolbar. This design has the same sections as the old design as we did not feel it was necessary to change how creating a question is done. A question can still be assigned multiple topics by checking multiple circles in the 'Topics' section. Saving the question as a draft will do so and take the user to the page where they can see all their created questions. If the user wants to edit and publish their draft in the future then they can do so by accessing the page via the navigation bar.

Guidelines window

Hans and Ryan (Use-case #1)

The screenshot shows a web browser window for the PeerWise website (<https://peerwise.cs.ouckland.ac.nz/course/main.php>). The title bar says "PeerWise". The main content area is titled "Creating questions guidelines". It contains several sections:

- Write Question:** A large text area with placeholder text "Please write your question here..."
- Creating questions:** Instructions for writing the main text of the question.
- Creating answers:** Instructions for creating up to five possible answers, with a sample interface showing five answer boxes. One box is labeled "C" and has a "Correct Answer" button below it.
- Explanation:** Instructions for providing an explanation for the question.
- Topics:** Instructions for defining up to five topics relevant to the question, with a sample interface showing two topics: "sign" and "Music". There is also a "Create" button.

At the bottom, there are buttons for "Submitting question", "Show me a preview before submitting", "OR", and "Save question as a draft". The footer includes social media links for Facebook, Instagram, and Twitter, and a "Change View" section with icons for desktop and mobile devices.

This page is just showing what the ‘creating questions guidelines’ window looks like. It is a pop-up window meaning the user can close or minimise it at any time and resume creating their question. The guidelines have a scroll bar so the window doesn’t have to be big or the text doesn’t have to be small to fit the text in the window.

Preview Question

Hans and Ryan (Use-case #1)

The screenshot shows a web browser window for the PeerWise platform. The URL in the address bar is <https://peerwise.cs.auckland.ac.nz/course/main.php>. The page title is "PeerWise". The navigation menu includes Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. The main content area is divided into four sections: "Question Information" (blue background), "Possible Answers" (dark grey background), "Explanation" (dark blue background), and "Submitting question" (white background). In the "Question Information" section, there is a "Question Title" input field containing "Question title". Below it, under "Topics", is "General". In the "Possible Answers" section, five options are listed: A Testing (grey), B Testing (green), C Testing (grey), D Testing (grey), and E Testing (grey). In the "Explanation" section, there is a text input field with placeholder text "Please provide an explanation for your answer here...". In the "Submitting question" section, there are two buttons: "Go back and make changes" and "Save question". Between them is the text "OR". At the bottom of the page, there are social media icons for Facebook, Instagram, and Twitter, with the text "Follow us on social". There is also a "Change View" button and icons for desktop and mobile devices.

This page has a very similar design to the creating questions page since they are directly related. This page is only accessed if the ‘Show me a preview before submitting’ button is pressed on the creating questions page. This page previews all the fields of the question and it allows the user to go back to edit their question by clicking on the ‘Go back and make changes’ button or they can publish the question by clicking on the ‘Save question’ button (the user will be taken to the page showing all their questions after). Under the ‘Possible Answers’ section the correct answer is indicated by a green background on the answer letter (e.g. B in the photo above).

Viewing your question

Hans and Ryan

The screenshot shows a web browser window for the PeerWise platform at the URL <https://peerwise.cs.cduckland.ac.nz/course/main.php>. The page displays a question titled "What is 2+2-1?".

Question Details:

- Topic:** Testing
- Answers:**

Option	Answer	Number of times chosen
A	0	2 (25%)
B (Correct Option)	3	4 (50%)
C	5	2 (25%)

- Explanation of the correct answer:** "2+2=3 quick maths" - Big Shaq | Improve Explanation
- Ratings (Average Rating: 3.61, Average Difficulty: Easy):**

Quality Rating	Difficulty: Easy	Difficulty: Medium	Difficulty: Hard	Total
Excellent (5.0)	4	1	0	5
Very Good (4.0)	3	0	0	3
Good (3.0)	5	2	1	8
Fair (2.0)	2	0	0	2
Poor (1.0)	0	0	0	0
Very Poor (0.0)	0	0	0	0

- Actions:** View Previous Version | Edit Question | Delete Question

Comments Section:

- "Great question" - Nyle | Posted on 10th May 5:05am
- "Love the song" - Hailey | Posted on 9th May 1:02pm
- "A classic question" - Mason | Posted on 8th May 12:00pm
- "Love it!" - Sam | Posted on 7th May 11:05pm
- "Genius!!!!!!" - Nathan | Posted on 4th May 6:00pm
- "I don't understand the answer" - Holly | Posted on 27th April 4:56am
- "Too easy!" - Lily | Posted on 27th April 12:35pm
- "Very nice" - Tom | Posted on 28th April 6:07pm
- "Excellent!!" - Ben | Posted on 28th April 6:07pm

Social Media and Other Options:

- Follow us on social media: Facebook, Instagram, Twitter.
- Change View: Desktop, Mobile.

This page shows the details of a question the user has created. The user can improve the explanation by clicking on the 'Improve Explanation' button. The purpose of this is incase the explanation of their question is lacking, though the user can also edit their explanation (and the rest of their question) by using the Edit Question button. If the question has previous version (versions before editing) the user can view the most recent previous version using the 'View Previous Version' button. They can also choose to delete the question. This page mimics the layout of 'Viewing your answer to a question' page as they both are similar (viewing the details of a question/answer).

Improve Explanation

Hans and Ryan

The screenshot shows a web browser window for the PeerWise platform. The URL in the address bar is <https://peerwise.cs.auckland.ac.nz/course/main.php>. The main content area displays a question titled "What is 2+2-1?". Below the question, it says "Topic: Testing". The "Correct Answer" is listed as "B. 3". Under "Current Explanation of the correct answer", there is a box containing the text "'2+2-1=3 quick maths' - Big Shaq". A section titled "Explanation Improvement" contains a text input field with the placeholder "Please write your improvement to this explanation here. It will be appended to the current explanation". At the bottom of this section are two buttons: "Submit" and "Cancel". At the very bottom of the page, there is a footer with social media icons for Facebook, Instagram, and Twitter, followed by the text "Follow us on social". On the right side of the footer, there is a "Change View" button with icons for desktop and mobile devices.

This page lets the user improve the explanation of any question (their own or others). They can only improve the explanation of a question they didn't create if they have answered the question. The design of this page is less complicated than the designs of the pages above (doesn't have multiple sections etc.) as the task it is doing is less complex. The first text box on the page can't

be edited by the user but the second can. The text in the second text box is appended to the first once the user clicks the Submit button. If the user clicks the submit button or the cancel button then they are taken back to the page they used to reach this page.

Sarah and Matthew won't be visiting this page as they won't be creating or answering questions however, an improvement on our new design for PeerWise would be if instructors could improve explanations to questions without having to answer them. This would allow teachers to help students understand questions by improving weak explanations.

Previous Versions

Hans and Ryan

The screenshot shows a web browser displaying a PeerWise course page. The URL in the address bar is <https://peerwise.cs.auckland.ac.nz/course/main.php>. The page title is "PeerWise". The navigation menu at the top includes Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. The main content area displays a question titled "What is 2+2-1? (!!! PREV VER)". Below the title, it says "Topic: Testing". The "Answers" section shows a table:

Option	Answer	Number of times chosen
A	0	2 (25%)
B (Correct Option)	3	4 (50%)
C	5	2 (25%)

The "Explanation of the correct answer" is "2+2-1=3 quick maths" - Big Shaq. There is a link to "Improve Explanation". The "Ratings (Average Rating: 3.61, Average Difficulty: Easy)" section shows a table:

Quality Rating	Difficulty: Easy	Difficulty: Medium	Difficulty: Hard	Total
Excellent (5.0)	4	1	0	5
Very Good (4.0)	3	0	0	3
Good (3.0)	5	2	1	8
Fair (2.0)	2	0	0	2
Poor (1.0)	0	0	0	0
Very Poor (0.0)	0	0	0	0

The "Comments" section lists several posts:

- "Great question" - Nyle (Posted on 10th May 5:05pm)
- "Love the song" - Hailey (Posted on 9th May 1:02pm)
- "A classic question" - Mason (Posted on 8th May 12:00pm)
- "Love it!" - Sam (Posted on 7th May 11:05pm)
- "Genius!!!!!!" - Nathan (Posted on 4th May 5:00pm)
- "I don't understand the answer" - Holly (Posted on 29th April 4:56am)
- "Too easy" - Lily (Posted on 29th April 12:35pm)
- "Very nice" - Tom (Posted on 28th April 6:07pm)
- "Excellent" - Ben

At the bottom, there are social media links for Facebook, Instagram, and Twitter, with the text "Follow us on social". There is also a "Change View" button with icons for desktop and mobile devices.

This page shows the previous version of a question. E.g. The difference between this version of the question 2+2-1 and the current version is this version has '(!!! PREV VER)' as part of the title. Since this is a previous, archived version of the question the user can't edit or delete it however, they can still improve the explanation of it so it is not a static archive. The design of

this page is essentially identical as the design of the page showing the current version for consistency's sake.

Delete Question Confirmation

Hans and Ryan (Use-case #7)

The screenshot shows a 'Delete Question Confirmation' dialog box centered over a question page. The dialog contains the text: 'This will permanently delete the question, and all associated ratings and feedback comments. Are you sure you want to delete this question?'. It has 'Delete' and 'Cancel' buttons at the bottom. The background page displays a question titled 'What is 2+2-1?' with three options: A (0), B (Correct Option, 3), and C (5). Below the question is an explanation: "'2+2-1=3 quick maths' - Big Shaq" and a 'Improve Explanation' button. To the right, there is a 'Comments' section with several posts from users like Nyle, Hailey, Mason, Sam, and Nathan, each with a timestamp. At the bottom of the page are buttons for 'View Previous Version', 'Edit Question', and 'Delete Question'. Social media icons for Facebook, Instagram, and Twitter are at the very bottom.

Since Hans and Ryan will be the only personas creating the questions, they will also be the only personas deleting questions as well. This page is exactly the same as ‘viewing your question’ except it has a window making sure the user wants to delete their question. The window can’t be minimised and only closes once the user either chooses to delete the question or not delete it. Making the user confirm deleting their work is used on many websites/systems/services as it is irreversible and it prevents the user misclicking on the button and accidentally deleting their work. If the user clicks on the cancel option the window closes and the question is not deleted. If the user clicks the delete option the question is deleted and the user is taken to the page where they can view all their questions.

Edit Question Confirmation

Hans and Ryan (Use-case #6)

The screenshot shows a web browser window for the PeerWise platform. The URL in the address bar is <https://peerwise.cs.auckland.ac.nz/course/main.php>. The page title is "Edit Question Confirmation". The main content area displays a question titled "What is 2+2-1?". Below it, there's a table of answers with one row selected: "B (Correct Option)". To the right of the table is a "Comments" sidebar listing several user posts. A central modal dialog box is open, asking for confirmation to edit the question. The dialog contains a message about resetting responses and ratings, and two buttons: "Edit" and "Cancel". At the bottom of the main content area are buttons for "View Previous Version", "Edit Question", and "Delete Question". The footer features social media icons for Facebook, Instagram, and Twitter, with a link to "Follow us on social".

https://peerwise.cs.auckland.ac.nz/course/main.php

PeerWise

Home | Join a Course | Switch Courses | Create | View | Contact Us | Log Out

What is 2+2-1?

Topic: Testing

Answers

Option	Answer	Number of times chosen
A		
B (Correct Option)		
C		

If you edit this question, any responses, ratings and comments will be reset. The old version of the question, along with all associated responses, ratings and feedback, will be archived. You may view the archived version, however it will no longer be available for others to answer. Are you sure you want to edit this question?

Edit | Cancel

Ratings (Average Rating: 3.61, Average Difficulty: Easy)

Quality Rating	Difficulty: Easy	Difficulty: Medium	Difficulty: Hard	Total
Excellent (5.0)	4	1	0	5
Very Good (4.0)	3	0	0	3
Good (3.0)	5	2	1	8
Fair (2.0)	2	0	0	2
Poor (1.0)	0	0	0	0
Very Poor (0.0)	0	0	0	0

View Previous Version | Edit Question | Delete Question

Comments

"Great question" - Nyle
Posted on 10th May 5:05pm

"Love the song" - Hailey
Posted on 9th May 1:02pm

"classic question" - Mason
Posted on 8th May 12:00pm

"Love it!" - Sam
Posted on 7th May 11:05pm

"Genius!!!!!!" - Nathan
Posted on 4th May 5:00pm

"I don't understand the answer" - Holly
Posted on 29th April 4:56am

"Too easy" - Lily
Posted on 29th April 12:35am

"Very nice" - Tom
Posted on 28th April 6:07pm

"Excellent" - Ben

Change View
Desktop | Mobile

Since Hans and Ryan will be the only personas creating questions they also will be the only personas editing questions since users can only edit their questions, not others. So, they will be the only ones seeing this pop-up window. This page is like the delete question confirmation page

in the sense that the only difference between this page and the viewing your question page is the pop-up window. Having this confirmation window is necessary since editing the question will mean any responses, ratings and comments will be archived along with the question itself. This means the question will have no responses, ratings and comments so, it is important that the user knows this before editing their question. Clicking the edit option will take the user to the editing question page whereas clicking on the cancel option will close the window.

Editing questions

Hans and Ryan (Use-case #6)

The screenshot shows the PeerWise editing interface. At the top, there's a navigation bar with links for Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. A message below the navigation bar states: "You are editing an existing question. Once you save these changes, any existing responses, ratings and feedback will be archived." The main area is divided into four sections: "Edit Question" (with a text input field), "Edit Possible Answers" (listing five options labeled A through E, each with a "Correct Answer" checkbox), "Edit Explanation" (with a text input field), and "Change Topic" (with radio buttons for General, Testing, Design, Music, and a "Create a new topic" button). Below these is a "Submitting changes" section with buttons for "Show me a preview before submitting" and "Save question as a draft". At the bottom, there are social media icons for Facebook, Instagram, and Twitter, and a "Follow us on social" link. There are also "Change View" and device icon buttons.

This is the page for editing a question you (the user) have created. It looks essentially the same as creating the question since editing a question is just changing the fields of a question that was initially created. There is a message underneath the navigation bar reminding the user that once they click the 'Show me a preview before submitting' button that the questions responses, ratings and comments will be archived and can be seen using the 'View Previous Version' button the

viewing your question page. Saving the question as a draft will store the edited question in a draft but it will not publish these changes.

Viewing all comments on your questions

Hans and Ryan

The screenshot shows a web browser window for the PeerWise website (<https://peerwise.cs.auckland.ac.nz/course/main.php>). The title bar indicates the URL. The main content area features the PeerWise logo at the top. Below the logo is a navigation bar with links: Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. The main content area is titled "Comments". It contains two tabs: "Comments on your questions" (which is selected) and "Your comments". Under the "Comments on your questions" tab, there is a list of comments grouped by question. Each group starts with a question heading (e.g., "2+2-1", "Third Question", "Second Question") followed by a list of comments. The comments include the text of the comment, the poster's name, and the timestamp. At the bottom of the comments section, there is a "Change View" button with icons for desktop and mobile devices, and a "Follow us on social" section with links to Facebook, Instagram, and Twitter.

Comment	Poster	Date
"Great question"	Nyle	10th May 5:05am
"Love the song"	Hailey	9th May 1:02pm
"Very difficult"	Tim	8th May 8:25pm
"A classic question"	Mason	8th May 12:00pm
"Love it!"	Sam	7th May 11:05pm
"Makes you think"	Trevor	7th May 2:15pm
"Genius!!!!!!11!"	Nathan	4th May 5:00pm
"I don't understand the answer"	Holly	29th April 4:56am

This page lets users view all comments on their questions. This is so that they don't have to visit each question to see the comments, instead they can just visit this page and see all the comments at once. There are two modes to this page ('all comments on their questions' and 'all the comments they have made') and the user can switch between these modes using the buttons above the comments. The darker button indicates the current mode. This page has a scrollbar so the user can see all the comments. Users can quickly access the question that the comment was made on by clicking the comment heading. Only Hans and Ryan would visit this page since Matt/Sarah aren't creating questions.

Viewing all your comments

Hans and Ryan

The screenshot shows a web browser window for the PeerWise website at <https://peerwise.cs.auckland.ac.nz/course/main.php>. The page title is "Comments". At the top, there is a navigation bar with links: Home, Join a Course, Switch Courses, Create, View, Contact Us, and Log Out. The "View" link is highlighted. Below the navigation bar, the PeerWise logo is displayed. The main content area shows a list of comments under the heading "What year was COVID-19 discovered?". Each comment includes the text, the poster's name, and the posting date. The comments are: "Name of virus gives this answer away" posted on 9th May 8:00pm, "This question does indeed work" posted on 4th May 7:00pm, "Wow it works" posted on 30th April 6:00pm, "Wow it works cool" posted on 25th April 5:00pm, "Great" posted on 20th April 4:00pm, "Very nice" posted on 15th April 3:00pm, "Great question" posted on 10th April 2:00pm, "Answer was a bit ambiguous" posted on 5th April 1:00pm, and "Test question #7". At the bottom of the page, there are social media icons for Facebook, Instagram, and Twitter, with the text "Follow us on social!". There are also "Change View" and device selection buttons.

This page is showing the other mode of the viewing comments page. The headings of the comments link to the answer the user made that included said comment. The format of the comments are exactly the same as the other mode (except it doesn't show who it is from since all the comments are from you) since it doesn't need to be different. Sarah and Matthew wouldn't be using this mode either since to make a comment on a question you must first answer the question.

Navigation Bar Switch Courses Options

Hans, Ryan, Sarah and Matthew



This page shows what options appear when the user hovers over a tab in the navigation bar that has options. There are three tabs in the navigation bar that have options, ‘Switch Courses’, ‘Create’ and ‘View’. Since the user can only hover over one tab at a time to keep the design realistic I have a page for each tab. This page shows the options that show when ‘Switch Courses’ is hovered over. Each option is a course that the user has joined that isn’t their active course (course that they are currently viewing). If the user clicks on one of these courses tab (e.g. if the user clicks on ENGR301) then they will be taken to the homepage of that course. It is important to note that when the user logs in their homepage will be the homepage of the last course they switched to or if they haven’t switched yet then the initial course they joined. When the user hovers over any tab in the navigation bar the colour of the tab changes to grey to indicate that the user is hovering over it and if the user hovers over a tab option then the color changes from grey to black for that option. The main body of this page and the following two pages is blank space. This is to show that these pages are generic and aren’t ‘real pages’, they are just showing the navigation bar design. What I mean by this is, these navigation bar drop-down options can be seen on any page assuming the user hovers over the right tab. All personas could

use this option since Matt and Sarah could be managing multiple courses on PeerWise and Ryan and Hans could be a part of multiple PeerWise courses.

Navigation Bar Create Options

Hans and Ryan (Use-case #1, Use-case #8)



This ‘page’ shows the navigation bar drop-down options for the ‘Create’ tab. The user can navigate to the ‘creating question’ page by clicking on the Question option or they can navigate to the quiz creation page by clicking on the Quiz option. Since you need to answer questions to create a quiz Sarah and Matthew wouldn’t be using this drop-down option (or the drop-down option for creating questions) however, Ryan and Hans would definitely use these drop-down options.

Navigation Bar View Options

Hans, Ryan, Sarah and Matthew (Use-case #14, Use-case #15)



This page shows the drop-down options for the tab ‘View’ in the navigation bar. The first option ‘Leaderboards & Badges’ takes the user to the page when they can see the leaderboards and their badges. Sarah and Matt would use this option to see their classes progress and to gauge how much their class is interacting with/using PeerWise. Ryan would also use it to see how many badges he has got. The next option ‘Comments’ takes the user to the page where they can either view comments on their questions or comments they have created. Hans and Ryan would use this option as well since they likely will be making questions and comments. The last option ‘Draft’ only shows up if the user has a question saved as a draft. Clicking on this option shows the ‘editing question’ page where the user can edit their draft and see a preview of it before publishing it. Hans and Ryan would likely use this option since they may need to edit questions.

Information Hierarchy

We created the Information Hierarchy in Adobe XD.

The Adobe XD file that represents our Information Hierarchy can be found in our gitlab repository (<https://gitlab.ecs.vuw.ac.nz/onginyle/swen303-assignment-2>). The key bindings

associated with the Information Hierarchy Adobe XD Prototype are stored in a text file in this repository.

Reflection

We chose to not update our personas and tasks. As we believed that they were exceptional enough that they need not be updated. We also did not receive any feedback on any of the sections which tells us that there was no need to update part 2 and part 3 of the assignment.

I believe we have covered all the use cases and the personas in each wireframe. We have also created wireframes that were not a part of our use cases. The home page which I was designing was not a part of our use case but very much integral to the website.

I worked on homepage, register page, instructor register page, the logged in pages, answer question, rating question, quiz results, quiz creation, verifying email, change password, join course, activate, forgot password, reset password, badges/leaderboards, and the feedback page.

A strength that the website has is that I improved the registration process by having all the fields in one page instead of separating each field in a different page. This adds more convenience to the user because they don't have to go to a new page every time they complete a field. I also made the login be in the home page so that users don't need to go to another page if all they want is to login to PeerWise they can do so the moment they visit the website.

A weakness to my design is that it has some assumption that we have to make that the system must do. For example when the user requests to reset their password we have to assume that the system sends a link to the users email and that link leads to the reset password page. The design also does not give a lot of feedback to the user if they entered a field incorrectly. For example if the user incorrectly types in their password they do not get feedback whether they type it incorrectly.

I've learnt that the current PeerWise is very poor in adding convenience to the user by getting to jump through unnecessary hoops to accomplish a task, for example the registration process. This also adds more pages for PeerWise to create and present to the user. Therefore it makes the service less efficient. I've learnt to try and not get in the way of the user by simplifying the registration process to one page and by combining similar processes such as the badges and leaderboards into one page since they both accomplish similar tasks.