

Hong Kong Diploma of Secondary Education Examination 2019
Information and Communication Technology
School-based Assessment

Elective C: Multimedia Production and Web Site Development
Self-learning Platform

School: [REDACTED]

Class: [REDACTED]

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HKID Number: [REDACTED]

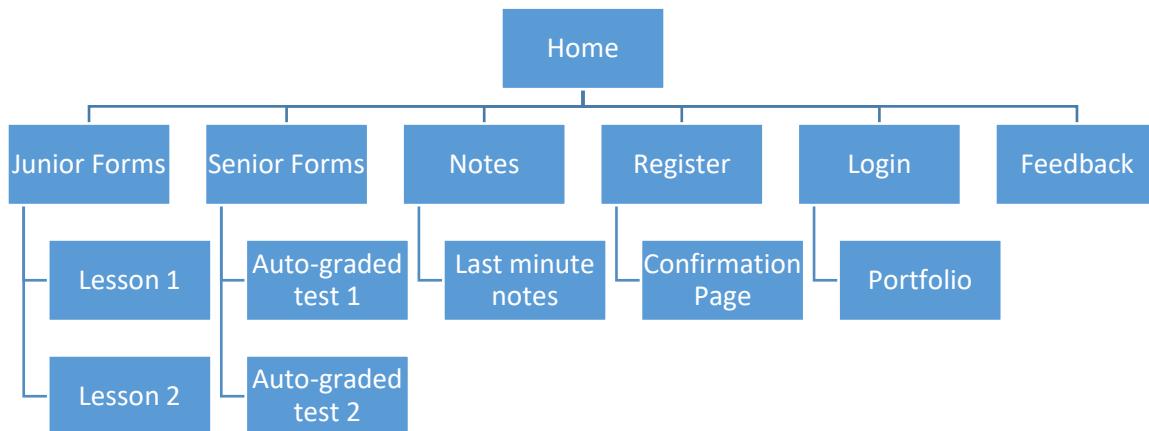
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Objective

A self-directed learning website aiming at secondary school students who are taking the DSE public exam. Materials in the site will help them prepare for the exams and to catch up with content they likely to have forgotten from the junior forms. There are also notes for last minute revision before a test or exam, and auto-graded tests for students to test out their ability.

Website structure



Website Color Scheme

Black, Grey, White and Green, to create a clean, modern and mature look as the target audience is senior students.

Home Page

Overall Layout

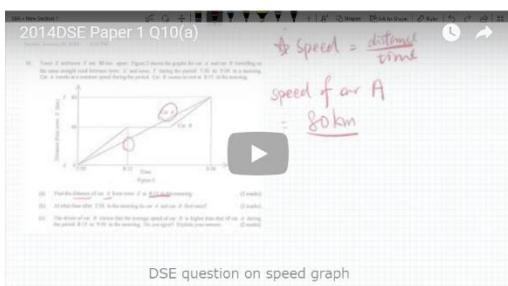


HOME JUNIOR FORM SENIOR FORM NOTES REGISTER LOGIN

Welcome

Sneak peek of what's inside

1 / 2



DSE question on speed graph

• •



Who are WE?

We are a self-learning website created for students in the DSE curriculum, specialized in DSE Mathematics. We understand the struggle of going to school and tutorials after school. Sometimes we just want to stay home and self study instead of attending classes. But, you do not have materials to work with. That is when we step in. Created by students, we know your needs and what suits you most.

What YOU may get from the site

You came to find resources, we provide them for you. We include tutorial videos, interactive quizzes for you to check your progress and notes for last-minute preparation. We also include extensive topics, ranging from form 1 topics to senior form topics such as advanced trigonometry. As for DSE questions, we also have some questions chosen to make into tutorial videos for students to familiarize themselves with the type of questions they may encounter.



The overall layout of the home page is as above. Formatting below the carousel is made with a table of three columns to keep everything in place.

HTML Codes used

```
336 <div style="width:100%">
337   <table width="100%" border="0">
338     <tr>
339       <td style="width:20; vertical-align: top"></td>
340       <td style="width:65%">
341         <h1><br>Who are WE?</h1>
342         <p>We are a self-learning website created for students in the DSE curriculum, specialized in DSE Mathematics.
343         We understand the struggle of going to school and tutorials after school.
344         Sometimes we just want to stay home and self study instead of attending classes.
345         But, you do not have materials to work with. That is when we step in.
346         Created by students, we know your needs and what suits you most.</p>
347         <br><br><br>
348         <h1>What YOU may get from the site</h1>
349         <p>You came to find resources, we provide them for you.<br>
350         We include tutorial videos, interactive quizzes for you to check your progress and notes for last-minute preparation.<br>
351         We also include extensive topics, ranging from form 1 topics to senior form topics such as advanced trigonometry.<br>
352         As for DSE questions, we also have some questions chosen to make into tutorial videos for students to familiarize
353         themselves with the type of questions they may encounter.</p>
354       </td>
355     <td style="width:15; vertical-align: top; padding-top: 25px">
356       <h2>Latest News</h2>
357       <p><font size="2">New Self Test on Permutation, Combination and Probability!<br>
358         <a href="sf2.html"> Click to See</a><br>2018.09.05<br>
359       <p><font size="2">New tutorial Video on Speed Graphs!<br>
360         <a href="jf1.html">Click to See</a><br>2018.05.30<br>
361       <p><font size="2">New Self Test on Trigonometry and Geometry!!<br>
362         <a href="sf1.html">Click to check it out</a><br>2018.05.30</font>
363       </td>
364     </tr>
365   </table>
366 </div>
```

Carousel

To display new content (mostly new tutorial videos).

Welcome

Sneak peek of what's inside

DSE 2014 P1 Q6

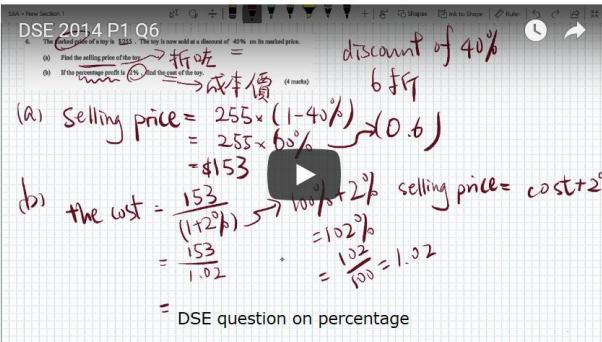
Find the selling price of the toy if it is sold at a discount of 40% on its marked price.

If the marked price is \$255, find the cost of the toy.

(a) Selling price = $255 \times (1 - 40\%)$
= $255 \times 60\%$
= \$153

(b) the wst = $\frac{153}{(1+2\%)} = 100\% + 2\% \text{ selling price} = \text{cost} + 2\%$
= $\frac{153}{1.02} = 102\% = \frac{102}{100} = 1.02$

= DSE question on percentage



Welcome

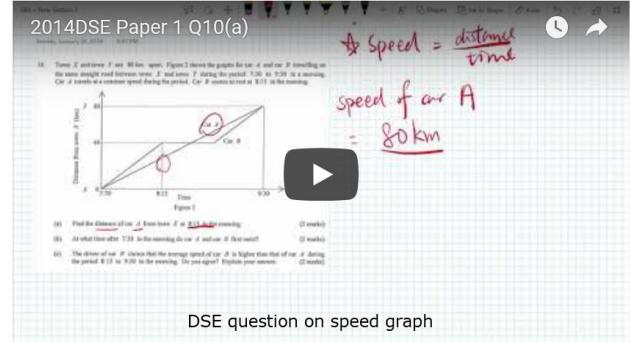
Sneak peek of what's inside

2014DSE Paper 1 Q10(a)

Tours X and Tours Y are 80 km apart. Figure 2 shows the graphs for car A and car B travelling on the same straight road between towns X and town Y during the period 1300 to 930 in a morning. Car A starts from town X at 1300 and reaches town Y at 930. Car B starts from town Y at 1300 and reaches town X at 930.

* Speed = $\frac{\text{distance}}{\text{time}}$

speed of car A
= 80 km



HTML Codes

```
<div>
292 <div class="slideshow-container">
293 <div class="mySlides fade">
294 <div class="numbertext">1 / 2</div>
295 <div style="align:center; padding-top:10px; padding-left:23%"><iframe src="https://www.youtube.com/embed/p00bz14K5xE?ecver=2"
296 width="285" height="160" frameborder="0" allow="autoplay; encrypted-media" style="position:relative; width:560px; height:315px; left:0;">
297 </div>
298 <div class="text"><font color="black">DSE question on percentage</font></div>
299 </div>
300 <div class="mySlides fade">
301 <div class="numbertext">2 / 2</div>
302 <div style="align:center; padding-top:10px; padding-left:23%"><iframe src="https://www.youtube.com/embed/S219LTozJDA?rel=0"
303 width="285" height="160" frameborder="0" allow="autoplay; encrypted-media" style="position:relative; width:560px; height:315px; left:0;">
304 </div>
305 <div class="text"><font color="black">DSE question on speed graph</font></div>
306 </div>
307 </div>
308 </div>
309 </div>
310 </div>
311 <br>
312 <div style="text-align:center">
313 <span class="dot"></span>
314 <span class="dot"></span>
315 <span class="dot"></span>
316 </div>
```

CSS Code

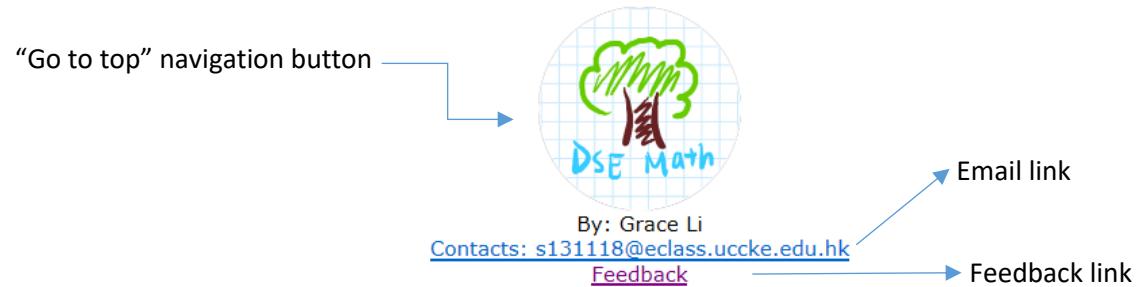
```
body {font-family: Verdana, sans-serif;}  
.mySlides {display: none;}  
img {vertical-align: middle;}  
.slideshow-container {  
max-width: 1000px;  
position: relative;  
margin: auto;  
margin-top: 10px;  
}  
.text {  
color: #f2f2f2;  
font-size: 15px;  
padding: 8px 12px;  
position: absolute;  
bottom: 8px;  
width: 100%;  
text-align: center;  
}  
.numbertext {  
color: #f2f2f2;  
font-size: 12px;  
padding: 8px 12px;  
position: absolute;  
top: 0;  
}  
  
.dot {  
height: 15px;  
width: 15px;  
margin: 0 2px;  
background-color: #bbb;  
border-radius: 50%;  
display: inline-block;  
transition: background-color 0.6s ease;  
}  
.active {  
background-color: #717171;  
}  
.fade {  
-webkit-animation-name: fade;  
-webkit-animation-duration: 1.5s;  
animation-name: fade;  
animation-duration: 1.5s;  
}  
@-webkit-keyframes fade {  
from {opacity: .4}  
to {opacity: 1}  
}  
@keyframes fade {  
from {opacity: .4}  
to {opacity: 1}  
}  
 @media only screen and (max-width: 300px) {  
.text {font-size: 11px}  
}
```

Javascript

```
318 <script>
319     var slideIndex = 0;
320     showSlides();
321
322     function showSlides() {
323         var i;
324         var slides = document.getElementsByClassName("mySlides");
325         var dots = document.getElementsByClassName("dot");
326         for (i = 0; i < slides.length; i++) {
327             slides[i].style.display = "none";
328         }
329         slideIndex++;
330         if (slideIndex > slides.length) {slideIndex = 1}
331         for (i = 0; i < dots.length; i++) {
332             dots[i].className = dots[i].className.replace(" dactive", "");
333         }
334         slides[slideIndex-1].style.display = "block";
335         dots[slideIndex-1].className += " dactive";
336         setTimeout(showSlides, 4000); // Change image every 2 seconds
337     }
338 </script>
```

“Go to top” button, Feedback and Contacts

This footer is actually on every single page of the site. The logo is a navigation button to the page's top, a “Feedback” link to a feedback form and an email link that will automatically open user's computer's email software to compose an email for contacts. It at the same time shows the email address to users for those who did not install an email software.

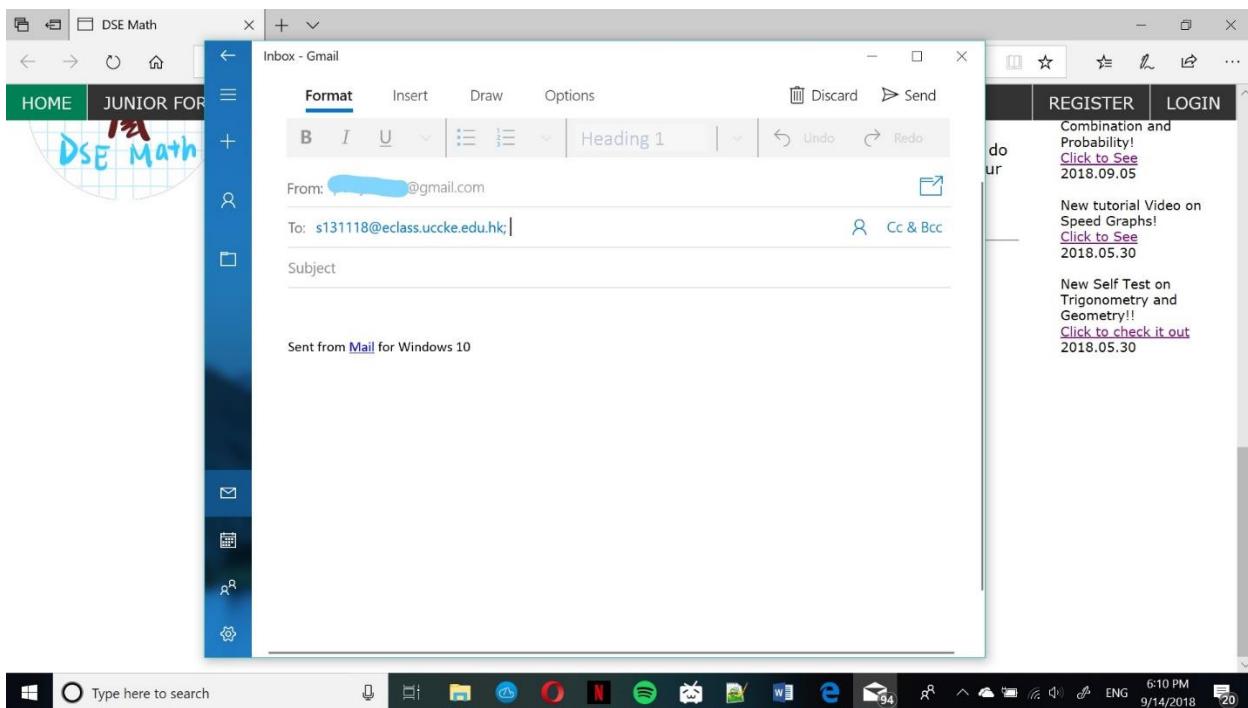


HTML Codes

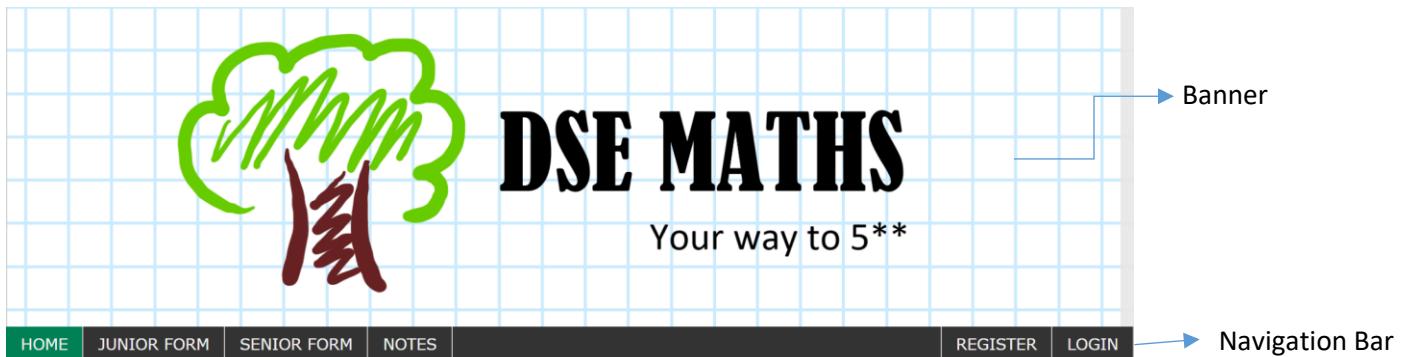
```
248 <center>
249   <a href="#top"></a><br>
250   <font size="1">
251     By: Grace Li<br>
252     <a href="mailto:s131118@eclass.uccke.edu.hk">
253       Contacts: s131118@eclass.uccke.edu.hk</a><br>
254     <a href="feedback.html">Feedback</a>
255   </font>
256 </center>
```



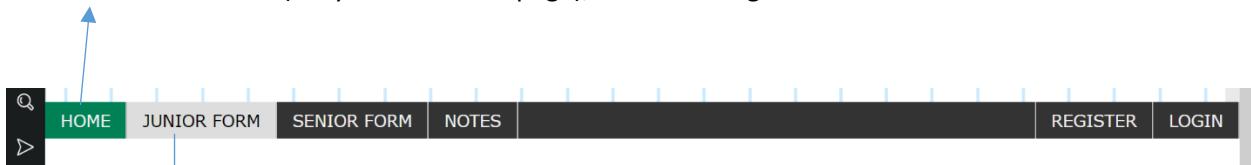
Once the email link is clicked, the system automatically calls out the default email software with the receiver address written.



Banner & Navigation Bar

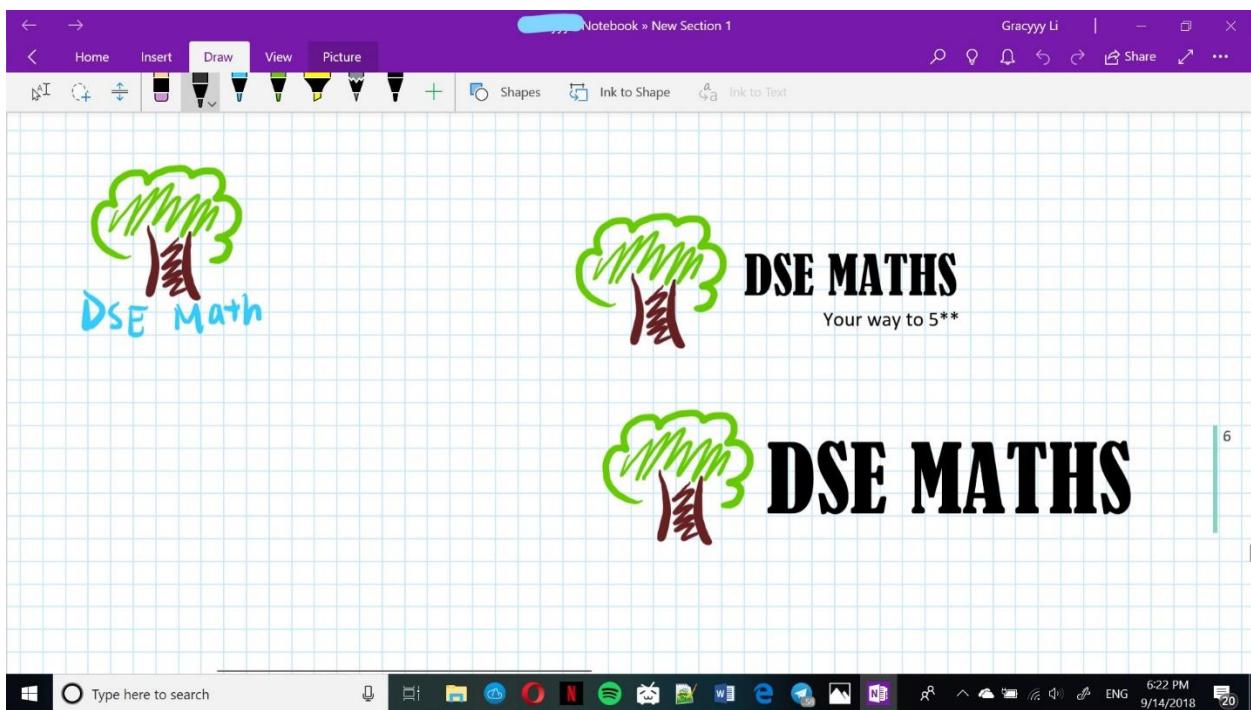


When a tab is selected (i.e. you are at that page), the tab changes color as below.



When a mouse hovers over a tab, the tab changes color as above.

The banner and the logo of the site is drawn in Microsoft OneNote with a tablet and pen.



CSS Code for navigation bar

```
.navbar {  
    overflow: hidden;  
    background-color: #333;  
    position: sticky;  
    top: 0px;  
}  
.navbar a {  
    float: left;  
    display: block;  
    color: #f2f2f2;  
    text-align: center;  
    padding: 8px 16px;  
    text-decoration: none;  
    font-size: 17px;  
    border-right: 1px solid #bbb;  
}  
.navbar a:last-child {  
    border-right: none;  
}  
.navbar a:hover {  
    background: #ddd;  
    color: black;  
}  
.active {  
    background-color: #008055;  
    color: black;  
}
```

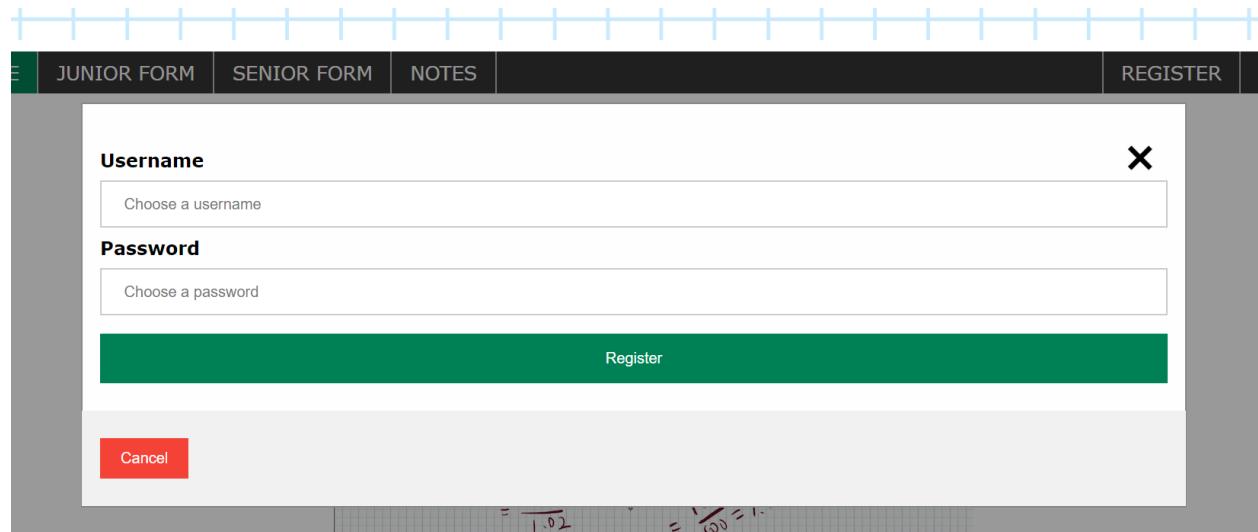
HTML Codes for navigation bar

```
<div class="navbar">  
    <a href="index.heml" class="active">HOME</a>  
    <a href="jform_temp.html">JUNIOR FORM</a>  
    <a href="sform_temp.html">SENIOR FORM</a>  
    <a href="#notes">NOTES</a>  
    <a href="#login" style="float:right">LOGIN</a>  
</div>
```

Register and Login

The register and login buttons on the navigation bar pops up a small box on top of the page to let users fill in a register/login form to perform the actions. All pages in the site except for the feedback page have the buttons.

To close the pop-up, users may click on the close button, the small cross on the top right corner or click on anywhere outside the box.



A pop-up box is shown when the register button is clicked.

Once users complete and submit the register form, they are redirected to the following page.

HOME JUNIOR FORM SENIOR FORM NOTES LOGOUT

Welcome!

YOU HAVE REGISTERED SUCCESSFULLY!

Click here and login again to activate your account!

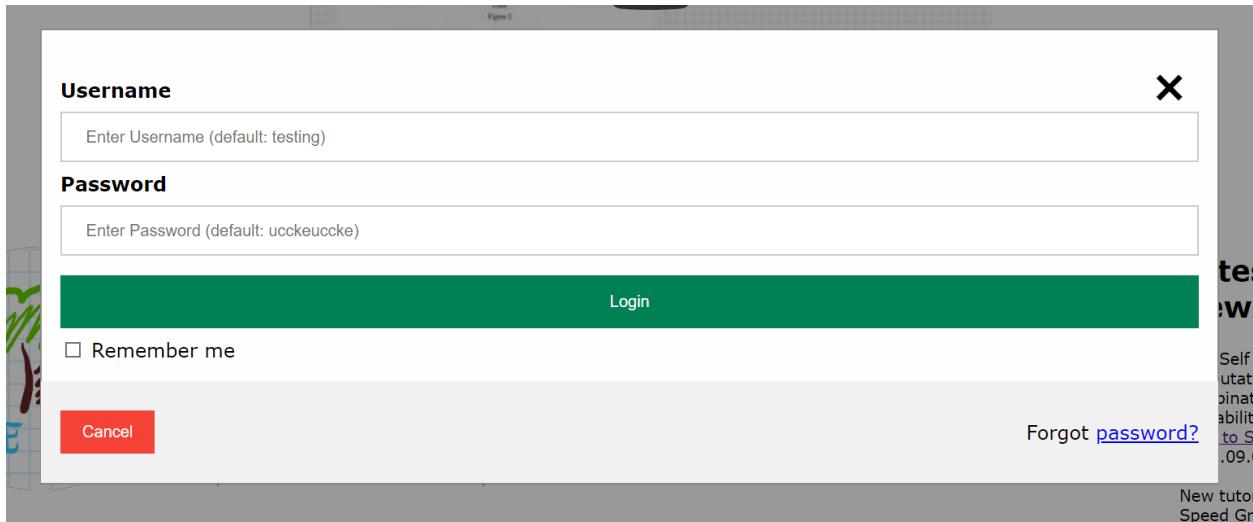
Note: This is only a prototype, please follow the instructions when you login. Thank you for your cooperation.

DSE Math

HTML codes and Javascript used in the register function

```
428 <!-- register form -->
429 <div id="id02" class="modal">
430
431   <form class="modal-content animate" action="register.html">
432     <div class="imgcontainer">
433       <span onclick="document.getElementById('id02').style.display='none'" class="close" title="Close Modal">&times;</span>
434     </div>
435
436     <div class="container">
437       <label for="uname"><b>Username</b></label>
438       <input type="text" placeholder="Choose a username" name="uname" required>
439
440       <label for="psw"><b>Password</b></label>
441       <input type="password" placeholder="Choose a password" name="psw" required>
442
443       <button type="submit">Register</button>
444     </div>
445
446     <div class="container" style="background-color:#f1f1f1">
447       <button type="button" onclick="document.getElementById('id02').style.display='none'" class="cancelbtn">Cancel</button>
448     </div>
449   </form>
450 </div>
451
452 <script>
453 // Get the modal
454 var modal = document.getElementById('id02');
455
456 // When the user clicks anywhere outside of the modal, close it
457 window.onclick = function(event) {
458   if (event.target == modal) {
459     modal.style.display = "none";
460   }
461 }
462 </script>
```

A similar pop-up box is shown when the login button is clicked. There are instructions shown in the input text field and validation is done to the login form.



Username

Password

! Wrong username

Username

Password

! Wrong Password

Remember me

When a wrong username or password is inputted, the site pops up an alert to remind the user.

After logging in, users are redirected to their portfolio which shows the statistics and progress of the user, as well as some basic information of the user's account. Below is the demo.

[HOME](#)
[JUNIOR FORM](#)
[SENIOR FORM](#)
[NOTES](#)
[LOGOUT](#)

Give Feedback

Email:
s131118@eclasse.ucec.edu.hk

Feedback

By Grace Li

Your Portfolio

<
|
>

Your name: TESTING

Your progress:

Senior Form:

1) Permutation, Combination and Probability - 100% - Great job!
2) Trigonometry and Geometry MC - 48% - Need some practise!



Once users click the logout button, they will be redirected to the home page.

```

387 <!-- login form -->
388 <div id="id01" class="modal">
389
390   <form class="modal-content animate" action="login.html">
391     <div class="imgcontainer">
392       <span onclick="document.getElementById('id01').style.display='none'" class="close" title="Close Modal">&times;

```

HTML codes used in the login form

```

414
415 <script>
416   // Get the modal
417   var modal = document.getElementById('id01');
418
419   // When the user clicks anywhere outside of the modal, close it
420   window.onclick = function(event) {
421     if (event.target == modal) {
422       modal.style.display = "none";
423     }
424   }
425 </script>
426

```

Javascript used in the login form

CSS codes used in both register and login

```
input[type=text], input[type=password] {  
    width: 100%;  
    padding: 12px 20px;  
    margin: 8px 0;  
    display: inline-block;  
    border: 1px solid #ccc;  
    box-sizing: border-box;  
}  
  
button {  
    background-color: #008055;  
    color: white;  
    padding: 14px 20px;  
    margin: 8px 0;  
    border: none;  
    cursor: pointer;  
    width: 100%;  
}  
  
button:hover {  
    background: #ddd;  
    color: black;  
}  
  
.cancelbtn {  
    width: auto;  
    padding: 10px 18px;  
    background-color: #f44336;  
}  
  
.imgcontainer {  
    text-align: center;  
    margin: 24px 0 12px 0;  
    position: relative;  
}  
  
.container {  
    padding: 16px;  
}  
  
span.psw {  
    float: right;  
    padding-top: 16px;  
/* Modal Content/Box */  
}  
  
.modal-content {  
    background-color: #fefefe;  
    margin: 5% auto 15% auto; /* 5% from the top,  
15% from the bottom and centered */  
    border: 1px solid #888;  
    width: 80%; /* Could be more or less, depending  
on screen size */  
}
```

```
.modal {  
    display: none; /* Hidden by default */  
    position: fixed; /* Stay in place */  
    z-index: 1; /* Sit on top */  
    left: 0;  
    top: 0;  
    width: 100%; /* Full width */  
    height: 100%; /* Full height */  
    overflow: auto; /* Enable scroll if needed */  
    background-color: rgb(0,0,0); /* Fallback color */  
    background-color: rgba(0,0,0,0.4); /* Black w/  
    opacity */  
    padding-top: 60px;  
}  
  
.close {  
    position: absolute;  
    right: 25px;  
    top: 0;  
    color: #000;  
    font-size: 35px;  
    font-weight: bold;  
}  
  
.close:hover,  
.close:focus {  
    color: red;  
    cursor: pointer;  
}  
  
.animate {  
    -webkit-animation: animatezoom 0.6s;  
    animation: animatezoom 0.6s  
}  
  
@-webkit-keyframes animatezoom {  
    from {-webkit-transform: scale(0)}  
    to {-webkit-transform: scale(1)}  
}  
  
@keyframes animatezoom {  
    from {transform: scale(0)}  
    to {transform: scale(1)}  
}  
  
@media screen and (max-width: 300px) {  
    span.psw {  
        display: block;  
        float: none;  
    }  
    .cancelbtn {  
        width: 100%;  
    }  
}
```

Other Pages

Pages like the “Junior Forms” section and Feedback

Navigation Bar

The navigation situation is switched once users enter other pages. It is in a two-layered design in which all subpages are listed on the left side of the screen, including an email link and a link to the feedback form. They all work the same as the ones in the footer. As for the top navigation bar, it stays unchanged. The banner on the top has been removed for a cleaner look, but the footer stays the same.

Top navigation bar (works and coded the same as the home screen one)

HOME JUNIOR FORM SENIOR FORM NOTES LOGIN

Junior Form

DSE 2014 - Speed Graph

DSE 2014 - Percentage

Email:
s131118@eclass.uccke.edu.hk

Feedback

By Grace Li

Why spend time on easy Junior Form questions?
Simply because it helps with your grades! Do you know that if a Form 3 student take the DSE Math exam, they are likely to get a level 2? Junior Form questions help you get marks easier, secure you base marks.
So, let's dive into today's question - DSE 2014 Paper 1 Section A Q10, a graph question.

2014DSE Paper 1 Q10(a)

10. Towns X and town Y are 80 km apart. Figure 2 shows the graphs for car A and car B travelling on the same straight road between towns X and town Y during the period 7:00 to 9:00 in a morning. On the morning of the examination, the two cars started from town X at different times.

Car A

Car B

Speed = $\frac{\text{distance}}{\text{time}}$

speed of car A
= 80 km

Side navigation bar

Code for side navigation bar

CSS Code

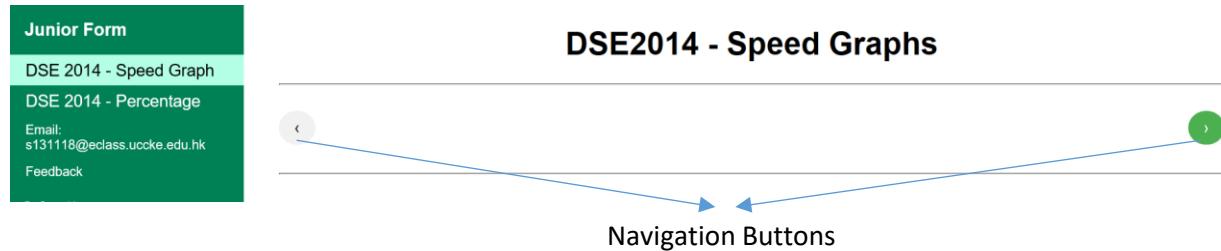
```
.sidenav {  
    height: 100%;  
    width: 240px;  
    position: fixed;  
    z-index: 1;  
    top: 0;  
    left: 0;  
    background-color: #008055;  
    overflow-x: hidden;  
    padding-top: 10px;  
    margin-top: 36px;  
}  
  
.sidenav a {  
    padding: 6px 8px 6px 16px;  
    text-decoration: none;  
    font-size: 17px;  
    color: white;  
    display: block;  
}  
  
.sidenav a:hover {  
    background: #b3ffe6;  
    color: black;  
}  
  
.main {  
    margin-left: 260px;  
    margin-top: 30px;  
    padding: 16px;  
}  
  
@media screen and (max-height: 450px) {  
    .sidenav {padding-top: 15px;}  
    .sidenav a {font-size: 18px;}  
}  
  
.sactive {  
    background-color: #b3ffe6;  
    color: black;  
}
```

HTML Codes

```
<div class="sidenav">  
    <div class="sidenavt">Junior Form</div>  
    <a href="jf1.html" class="sactive"><font color="black">DSE  
2014 - Speed Graph</font></a>  
    <a href="jf2.html">DSE 2014 - Percentage</a>  
    <a href="mailto:s131118@eclass.uccke.edu.hk"><font  
size="2">Email: s131118@eclass.uccke.edu.hk</font></a>  
    <a href="feedback.html"><font  
size="2">Feedback</font></a>  
    <div class="footer">  
        By Grace Li  
    </div>  
</div>
```

Navigation Buttons

Two small round buttons are added below the title of the page for smooth navigation between pages under the same section (i.e. Junior Forms, Senior Forms)



If the user now click the green arrow button, it will jump to the next page, i.e. the page titled “DSE 2014 – Percentage”, which is the next page showed up on the side navigation bar.

CSS Code

```
a {  
    text-decoration: none;  
    display: inline-block;  
    padding: 8px 16px;  
}  
a:hover {  
    background-color: #ddd;  
    color: black;  
}  
.previous {  
    background-color: #f1f1f1;  
    color: black;  
}  
.next {  
    background-color: #4CAF50;  
    color: white;  
}  
.round {  
    border-radius: 50%;  
}  
.left {  
    text-align: left;  
    float: left;  
}  
.right {  
    text-align: right;  
    float: right;  
}
```

HTML Codes

```
<hr><br>  
<a href="#1" class="previous round left">‹</a>  
<a href="jf2.html" class="next round right">›</a>  
<br><br><br><hr>
```

Tutorial Video Embed

Tutorial videos are recorded with the default Windows 10 Games Bar screen record, using Microsoft OneNote as the drawing pad. Audio is recorded and edited with Audacity, video is edited with Davinci Resolve 15.

The videos are stored at Youtube's server and embedded to the page with iframe.

DSE 2014 - Percentage
Email:
s13118@eclass.ucte.edu.hk
Feedback
By Grace Li

Junior Form questions help you get marks easier, secure you base marks.
So, let's dive into today's question - DSE 2014 Paper 1 Section A Q10, a graph question.

2014DSE Paper 1 Section A Q10(a)

10. Town X and town Y are 80 km apart. Figure 2 shows the graphs for car A and car B travelling on the same straight road between towns X and town Y during the period 7:30 to 9:30 in a morning. Car A travels at a constant speed during the period. Car B comes to rest at 8:15 in the morning.

Figure 2

Star icon: Speed = $\frac{\text{distance}}{\text{time}}$
Handwritten note: speed of car A = 80 km

10. Find the distance of car A from town X at 8:15 in the morning. (2 marks)
10. At what time after 7:30 in the morning do car A and car B first meet? (2 marks)
10. The driver of car B claims that the average speed of car B is higher than that of car A during the period 8:15 to 9:30 in the morning. Do you agree? Explain your answer. (2 marks)

HTML Codes

```
<center><iframe width="560" height="315"
src="https://www.youtube.com/embed/S2I9LT0zJDA?rel=0" frameborder="0" allow="autoplay;
encrypted-media" allowfullscreen></iframe></center>
```

Screen shot of the video

SEA - New Section 1

Sunday, January 14, 2018 10:11 PM

10. Town X and town Y are 80 km apart. Figure 2 shows the graphs for car A and car B travelling on the same straight road between towns X and town Y during the period 7:30 to 9:30 in a morning. Car A travels at a constant speed during the period. Car B comes to rest at 8:15 in the morning.

Figure 2

Star icon: Speed = $\frac{\text{distance}}{\text{time}}$
Handwritten note: speed of car B

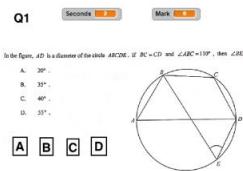
10. Find the distance of car A from town X at 8:15 in the morning. (2 marks)
10. At what time after 7:30 in the morning do car A and car B first meet? (2 marks)
10. The driver of car B claims that the average speed of car B is higher than that of car A during the period 8:15 to 9:30 in the morning. Do you agree? Explain your answer. (2 marks)

Self-test

There are a total of two self-tests involved in the website, with two versions.

Version One

This self-test is an application embedded from Scratch using <iframe>. It requires a flash player plugin in order to be played correctly.



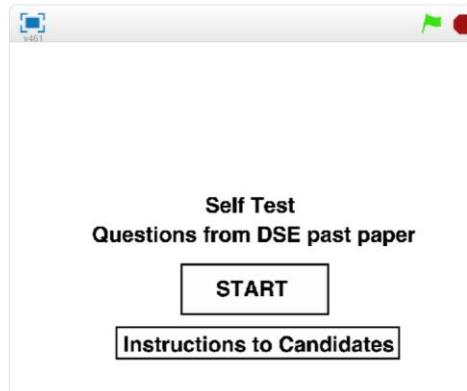
Oh no! We're having trouble displaying this Scratch project.

If you are on a mobile phone or tablet, try visiting this project on a computer.

If you're on a computer, your Flash player might be disabled, missing, or out of date. Visit [this page](#) to update Flash.

When users do not have Flash installed or enabled, the system shows them this error message.

If users have Flash player installed and enabled, the project shows.



HTML code used

```
302  
303 <iframe allowtransparency="true" width="485" height="402" src="http://scratch.mit.edu/projects/embed/226086338/?autostart=true"  
304 frameborder="0" allowfullscreen></iframe>  
305
```

It is a test for students to practice their speed on math multiple choice questions, such that there is a 40-second time limit set for each question.

It is also auto-marked and can automatically calculate the total marks of the user.

The screenshot shows a digital test interface. On the left, a vertical sidebar contains instructions: "1. You have 40 seconds for each question", "2. The time limit is set according to the DSE exam requirements, please follow", and "3. Enjoy math!". Below these is a "START" button. The main area is titled "Q1". It displays a timer at "Seconds 13" and a mark at "Mark 0". A blue arrow points from the top of the screen down to the "Seconds" field. To the right of the timer is a math problem: "In the figure, AD is a diameter of the circle $ABCDE$. If $BC = CD$ and $\angle ABC = 110^\circ$, then $\angle BED =$ ". Below the question are four options: A. 20° , B. 35° , C. 40° , and D. 55° . At the bottom are four boxes labeled A, B, C, and D, where the user can select an answer. To the right of the boxes is a diagram of a circle with a horizontal diameter AD . Points B , C , and E are on the circumference. BC and CD are arcs of equal length. Chords AB , BC , CD , and ED are drawn, forming a cyclic quadrilateral $ABCD$.

Instructions to candidates

There is a timer to keep time

The screenshot shows a digital test interface. The main area is titled "Q1". It displays a timer at "Seconds 197" and a mark at "Mark 0". A red arrow points from the top of the screen to the right of the timer. To the right of the timer is a math problem: "In the figure, AD is a diameter of the circle $ABCDE$. If $BC = CD$ and $\angle ABC = 110^\circ$, then $\angle BED =$ ". Below the question are four options: A. 20° , B. 35° , C. 40° , and D. 55° . At the bottom is a red box containing the text "Time is up". To the right of the box is a diagram of a circle with a horizontal diameter AD . Points B , C , and E are on the circumference. BC and CD are arcs of equal length. Chords AB , BC , CD , and ED are drawn, forming a cyclic quadrilateral $ABCD$.

The second part of the screenshot shows another question "Q2". It has a timer at "Seconds 2" and a mark at "Mark 0". A red arrow points from the top of the screen to the right of the timer. To the right of the timer is a math problem: "In the figure, $ABCD$ is a rectangle. If E is a point lying on AC such that $AE = 30\text{ cm}$, then $DE =$ ". Below the question are four options: A. $3\sqrt{65}\text{ cm}$, B. $5\sqrt{29}\text{ cm}$, C. $\sqrt{641}\text{ cm}$, and D. $\sqrt{697}\text{ cm}$. At the bottom is a red box containing the text "Ans: A". To the right of the box is a diagram of a rectangle $ABCD$ with vertices A at the bottom-left, B at the bottom-right, C at the top-right, and D at the top-left. The width AB is labeled "28 cm" and the height BC is labeled "21 cm". A diagonal line AC is drawn. A point E lies on the diagonal AC such that $AE = 30\text{ cm}$.

Once time is up, users cannot answer the question.

When users answer incorrectly,
the answer is shown to them.

Q1

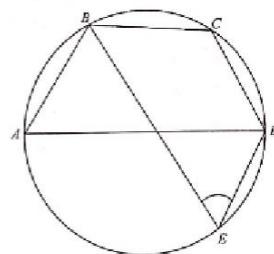
Seconds 3

Mark 1



In the figure, AD is a diameter of the circle $ABCDE$. If $BC = CD$ and $\angle ABC = 110^\circ$, then $\angle BED =$

- A. 20° .
- B. 35° .
- C. 40° .
- D. 55° .



You are correct

When the user answers correctly, a mark is added.

Some of the Scratch codes used

Q1

Seconds 2

Mark 0

In the figure, AD is a diameter of the circle $ABCDE$. If $BC = CD$ and $\angle ABC = 110^\circ$, then $\angle BED =$

- A. 20° .
- B. 35° .
- C. 40° .
- D. 55° .

Sprites: START, Sprite1, Sprite2, Sprite3, Sprite4, Sprite5

Backpack: Ans: C You are correct

Scripts:

- when backdrop switches to [Q1 v] show
- when green flag clicked hide
- when I receive [right v] hide
- when this sprite clicked hide
- when this sprite clicked broadcast [wrong v]
- when I receive [times up v] hide
- when I receive [right v] hide
- when I receive [wrong v] hide

Q1

Seconds 2

Mark 0

In the figure, AD is a diameter of the circle $ABCDE$. If $BC = CD$ and $\angle ABC = 110^\circ$, then $\angle BED =$

- A. 20° .
- B. 35° .
- C. 40° .
- D. 55° .

Sprites: START, Sprite1, Sprite2, Sprite3, Sprite4, Sprite5

Backpack: Ans: C You are correct

Scripts:

- when green flag clicked
- switch backdrop to [Q1 v]
- hide
- show variable [Seconds v]
- set [Seconds] to [0]
- if <[Seconds] < [10]> then
- repeat until <[backdrop name] = [Q2]>
- wait [1] secs
- change [Seconds] by [1]
- if <[Seconds] > [10]> then
- broadcast [times up v]

when backdrop switches to [backdrop2 v] show

Version Two

This self-test is a fill-in form with validation. It is able to auto-correct user's answers.

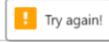
When an incorrect answer is input, the site asks the user to try again.

(a)

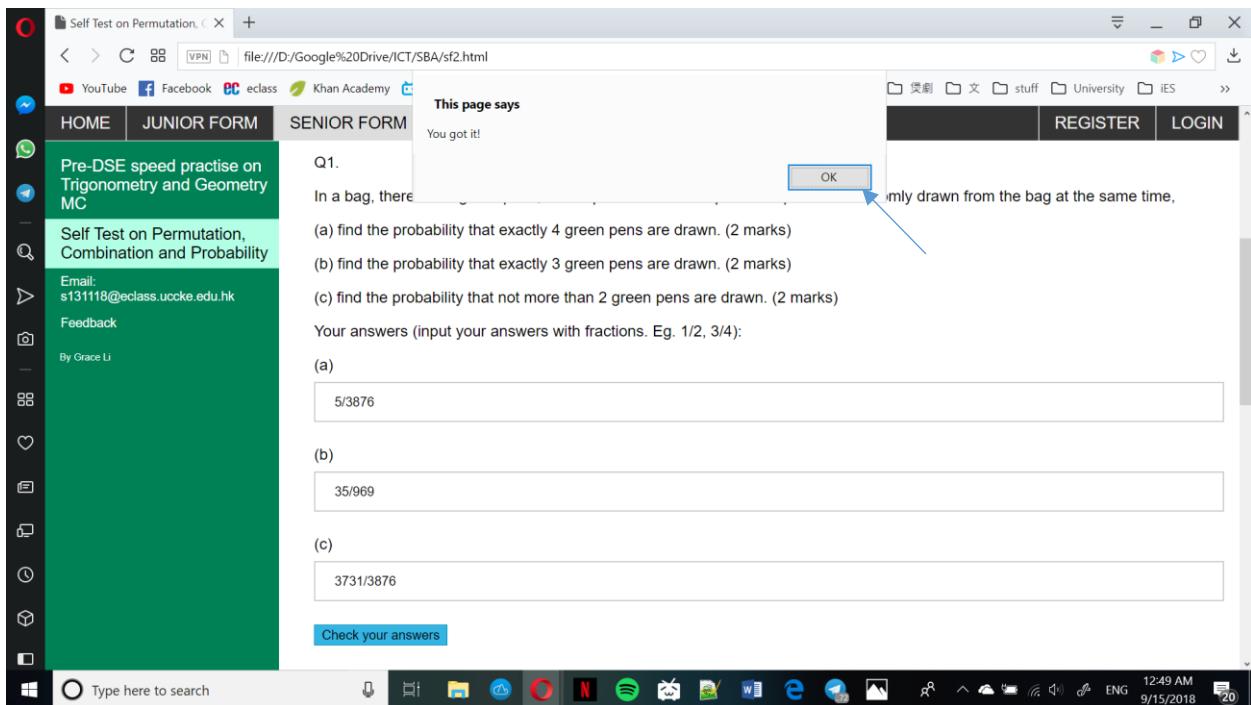
1/2

(b)

1

 Try again!

The form cannot be submitted until the user input all correct answers. An alert will pop up when the user got it all right.



Self Test on Permutation, Combination and Probability

file:///D:/Google%20Drive/ICT/SBA/sf2.html

YouTube Facebook eclass Khan Academy

HOME JUNIOR FORM SENIOR FORM

Pre-DSE speed practise on Trigonometry and Geometry MC

Self Test on Permutation, Combination and Probability

Email: s131118@eclass.ucke.edu.hk

Feedback

By Grace Li

This page says
You got it!

Q1. In a bag, there are 10 pens. Only 4 are green. If 3 pens are drawn from the bag at the same time, find the probability that exactly 4 green pens are drawn. (2 marks)

(a) find the probability that exactly 4 green pens are drawn. (2 marks)

(b) find the probability that exactly 3 green pens are drawn. (2 marks)

(c) find the probability that not more than 2 green pens are drawn. (2 marks)

Your answers (input your answers with fractions. Eg. 1/2, 3/4):

(a)

(b)

(c)

Check your answers

OK

12:49 AM 9/15/2018

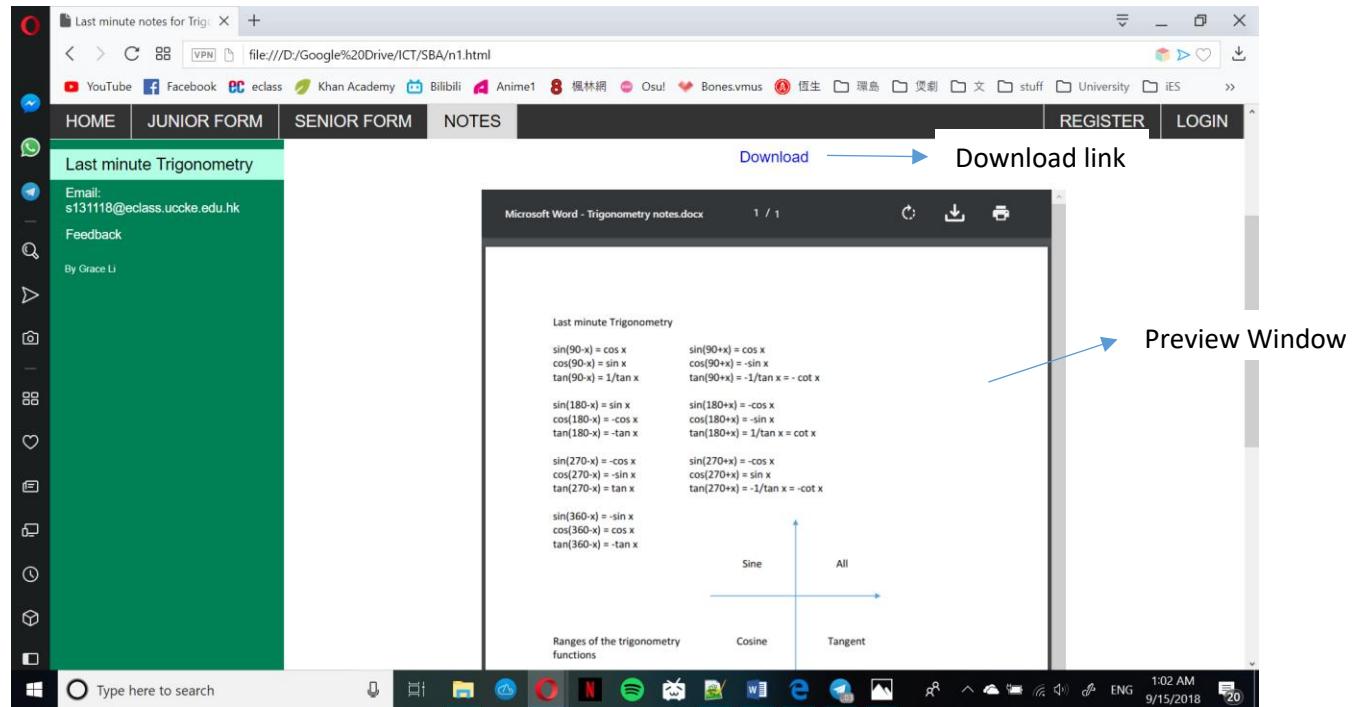
HTML code used for validation of form

```
307
308 <form id="q1" name="q1" method="post" action="" onSubmit="alert('You got it!');">
309 <p>Q1.</p>
310 <p>In a bag, there are 4 green pens, 7 blue pens and 8 black pens. If 5 pens are randomly drawn from the bag at the same time,</p>
311 <p>(a) find the probability that exactly 4 green pens are drawn. (2 marks)</p>
312 <p>(b) find the probability that exactly 3 green pens are drawn. (2 marks)</p>
313 <p>(c) find the probability that not more than 2 green pens are drawn. (2 marks)</p>
314 <p>Your answers (input your answers with fractions. Eg. 1/2, 3/4):</p>
315 <p>(a) <input type="text" name="q1a" id="q1a" pattern="5/3876" oninvalid="this.setCustomValidity('Try again!')" oninput="this.setCustomValidity('')" required></p>
316 <p>(b) <input type="text" name="q1b" id="q1b" pattern="35/969" oninvalid="this.setCustomValidity('Try again!')" oninput="this.setCustomValidity('')" required></p>
317 <p>(c) <input type="text" name="q1c" id="q1c" pattern="3731/3876" oninvalid="this.setCustomValidity('Try again!')" oninput="this.setCustomValidity('')" required></p>
318 <p><input type="submit" name="submit" id="submit" value="Check your answers"></p>
319 </form>
320
321 <br><br><br><br><br>
322
323 <form id="q2" name="q2" method="post" action="" onSubmit="alert('You got it!');">
324 <p>Q2.</p>
325 <p>If 4 boys and 5 girls randomly form a queue, find the probability that no boys are next to each other in the queue. (3 marks)</p>
326 <p>Your answers (input your answers with fractions. Eg. 1/2, 5/4):</p>
327 <p><input type="text" name="q2" id="q2" pattern="5/42" oninvalid="this.setCustomValidity('Try again!')" oninput="this.setCustomValidity('')" required></p>
328 <p><input type="submit" name="submit" id="submit" value="Check your answers" onclick="submitted()"></p>
329 </form>
330
331 <br><br><br><br><br>
332
333 <form id="q3" name="q3" method="post" action="" onSubmit="alert('You got it!');">
334 <p>Q3.</p>
335 <p>Bag A contains four cards numbered 1, 3, 5 and 7 respectively while bag B contains five cards numbered 2, 4, 6, 8 and 10 respectively.
336 If one card is randomly drawn from each bag, find the probability that the sum of the two numbers drawn is less than 9. (3 marks)</p>
337 <p>Your answers (input your answers with fractions. Eg. 1/2, 5/4):</p>
338 <p><input type="text" name="q2" id="q2" pattern="3/10" oninvalid="this.setCustomValidity('Try again!')" oninput="this.setCustomValidity('')" required></p>
339 <p><input type="submit" name="submit" id="submit" value="Check your answers"></p>
340 </form>
341
```

Notes

The notes are made with Microsoft Word and exported to pdf as pdf can be opened cross-platform and the formatting will not be altered.

The notes are embedded to the page using the tag <embed>. There is also a download link for users to download and view the notes.



HTML code used

```
295  
296 <p><a href="trigo.pdf">Download</a></p>  
297 <p><embed src="trigo.pdf" width="600px" height="800px"></p>  
298
```

Feedback Form

Users have to fill in a feedback form if they want to leave a comment. Some personal information is needed such as name, form and email.

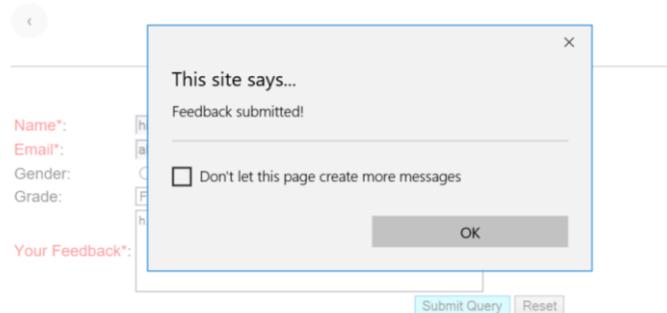
The screenshot shows a 'Give Feedback' sidebar on the left containing user details: Email (s131118@eclass.ucc.edu.hk), Feedback, and By Grace Li. The main content area is titled 'Feedback' and contains fields for Name, Email, Gender (Male/Female), Grade (Form 1 dropdown), and a large text area for 'Your Feedback'. At the bottom are 'Submit Query' and 'Reset' buttons.

Form validation is implemented. The name, email and feedback are required fields (i.e. presence check), while the email field is also equipped with format check (if the email doesn't contain a "@" it is rejected).

The left screenshot shows an invalid email input ('fd sui') with an error message 'Invalid Email address.' The right screenshot shows a required field ('Name*') left empty with an error message 'This is a required field.'

When an invalid email is inputted.

When a required field is not filled.



An alert box pops up once a feedback is submitted successfully.

HTML Codes

```
<form id="form1" name="form1" method="post" action="">
<table border="0">
<tr>
<td width="78"><font color="red">Name*</font>:</td>
<td width="204">
<input type="text" name="Name" id="Name" required></td>
</tr>
<tr>
<td><font color="red">Email*</font>:</td>
<td><span id="sprytextfield1">
<label for="Email1"></label>
<input type="text" name="Email1" id="Email1" required />
<span class="textfieldRequiredMsg">A real email address is required.</span><span
class="textfieldInvalidFormatMsg">Invalid Email address.</span></span></td>
</tr>
<tr>
<td>Gender:</td>
<td><input type="radio" name="radio" id="Male" value="Male" />
<label for="Male">Male</label>

<input type="radio" name="radio" id="Female" value="Female" />
<label for="Female">Female</label></td>
</tr>
<tr>
<td>Grade:</td>
<td><label for="Grade"></label>
<select name="Grade" id="Grade">
<option>Form 1</option>
<option>Form 2</option>
<option>Form 3</option>
<option>Form 4</option>
<option>Form 5</option>
<option>Form 6</option>
</select></td>
</tr>
<tr>
<td><font color="red">Your Feedback*</font>:</td>
<td><textarea name="Feedback" id="Feedback" cols="45" rows="5" required></textarea></td>
</tr>
</table>
<input name="Submit" type="submit" onclick="myFunction()">
<input name="Reset" type="reset">
</form>
<script type="text/javascript">
var sprytextfield1 = new Spry.Widget.ValidationTextField("sprytextfield1", "email");
</script>
<script>
function myFunction() {
    alert("Feedback submitted!");
} </script>
```

Mobile Version

To cater the needs of mobile device users, a separate mobile site is made. The mobile version has the same color scheme and similar overall design as the desktop version.

However, users cannot login to their accounts with the mobile version. As for the self-test involving any Flash plugin, they are hidden from the site.

The screenshot shows the top portion of a mobile website. At the top left is a logo featuring a stylized tree and the text "DSE MATHS". To its right is the slogan "Your way to 5**". Below the logo is a horizontal navigation bar with four green buttons: "HOME", "JUNIOR FORMS", "SENIOR FORMS", and "NOTES". Arrows point from the text labels to the corresponding parts of the screenshot.

About Us

We are a self-learning website created for students in the DSE curriculum, specialized in DSE Mathematics. We understand the struggle of going to school and tutorials after school. Sometimes we just want to stay home and self study instead of attending classes. But, you do not have materials to work with. That is when we step in. Created by students, we know your needs and what suits you most.

What YOU may get from the site

You came to find resources, we provide them for you.
We include tutorial videos, interactive quizzes for you to check your progress and notes for last-minute preparation.
We also include extensive topics, ranging from form 1 topics to senior form topics such as advanced trigonometry.
As for DSE questions, we also have some questions chosen to make into tutorial videos for students to familiarize themselves with the type of questions they may encounter.

The screenshot shows a "News" section with three items:

- New Self Test on Permutation, Combination and Probability!
[Click to See](#)
2018.09.05
- New tutorial Video on Speed Graphs!
[Click to See](#)
2018.05.30
- New Self Test on Trigonometry and Geometry!!
[Click to check it out](#)
2018.05.30

An arrow points from the text "Latest News" to the first news item.

Footer: There is a link for users to redirect to the desktop site.

Overall layout of 'Junior Forms' and 'Senior Forms' section

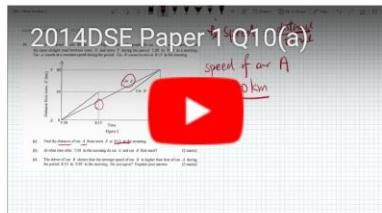
http://eclasse.uccke.edu.hk/~s131118/mjf1.htm

The screenshot shows the homepage of the DSE Maths website. At the top left is a logo of a stylized tree with green leaves and brown trunk. To the right of the logo, the text 'DSE MATHS' is written in large, bold, black letters, with 'Your way to 5**' in smaller text below it. Below the logo and text is a horizontal navigation bar with four green rectangular buttons. From left to right, the buttons are labeled: 'HOME', 'JUNIOR FORMS', 'SENIOR FORMS', and 'NOTES'. Each button has white text and a thin white border.

DSE 2014 - Speed Graph

Why spend time on easy Junior Form questions? Simply because it helps with your grades! Do you know that if a Form 3 student take the DSE Math exam, they are likely to get a level 2? Junior Form questions help you get marks easier, secure you base marks. So, let's dive into today's question - DSE 2014 Paper 1 Section A Q10, a graph question.

Click [here](#) if you experience difficulties watching the video



Content

DSE 2014 - Speed Graph

DSE 2014 - Percentage

By: Grace Li
Contacts: s131118@eclasse.uccke.edu.hk
[Feedback](#)
[Desktop version](#)

NOTES

Self Test on Permutation, Combination and Probability

Here are some questions from the HKDSE past papers for you to test yourself on the topics Probability, Combination and Permutation. Do remember to revise before you do this test:)

Q1.

In a bag, there are 4 green pens, 7 blue pens and 8 black pens. If 5 pens are randomly drawn from the bag at the same time,

(a) find the probability that exactly 4 green pens are drawn. (2 marks)

(b) find the probability that exactly 3 green pens are drawn. (2 marks)

(c) find the probability that not more than 2 green pens are drawn. (2 marks)

Your answers (input your answers with fractions. Eg. 1/2, 3/4):

(a) _____

(b) _____

(c) _____

Q2.

If 4 boys and 5 girls randomly form a queue, find the probability that no boys are next to each other in the queue. (3 marks)

Your answers (input your answers with fractions. Eg. 1/2, 5/4):

Q3.

Bag A contains four cards numbered 1, 3, 5 and 7 respectively while bag B contains five cards numbered 2, 4, 6, 8 and 10 respectively. If one card is randomly drawn from each bag, find the probability that the sum of the two numbers drawn is less than 9. (3 marks)

Your answers (input your answers with fractions. Eg. 1/2, 5/4):

Content

Self Test on Permutation, Combination and Probability

By: Grace Li
Contacts: s131118@eclasse.uccke.edu.hk
[Feedback](#)
[Desktop version](#)

```
| 271 | <body onload="javascript:redirect()">
```

Once the desktop version of the site is loaded, if the screen's width is smaller than or equals to 699px, users are redirected to the mobile site automatically.

Above and below are the HTML and Javascript used.

```
403 |
464 | <!-- redirect to mobile site -->
465 | <script type="text/javascript">
466 |   function redirect(){
467 |     if (screen.width <= 699) {
468 |       document.location = "mobile.html";
469 |     }
470 |   }
471 | </script>
472 |
```

CSS used in mobile site

```
6  * {
7   box-sizing: border-box;
8 }
9 .menu {
10  float:left;
11  width:20%;
12  text-align:center;
13 }
14 .menu a {
15  background-color:#008055;
16  padding:8px;
17  margin-top:7px;
18  display:block;
19  width:100%;
20  color:white;
21 }
22 .main {
23  float:left;
24  width:60%;
25  padding:0 20px;
26  color: black;
27 }
28 .right {
29  background-color:#008055;
30  float:left;
31  width:20%;
32  padding:15px;
33  margin-top:7px;
34  text-align:center;
35  color: white;
36 }
37
38 @media only screen and (max-width:620px) {
39  /* For mobile phones: */
40  .menu, .main, .right {
41    width:100%;
42  }
43 }
```

Testing

To ensure the site is user friendly and easy to use and all functions are working perfect, testing is needed to let us know what to improve and to check if there are any bugs.

General testing for bugs

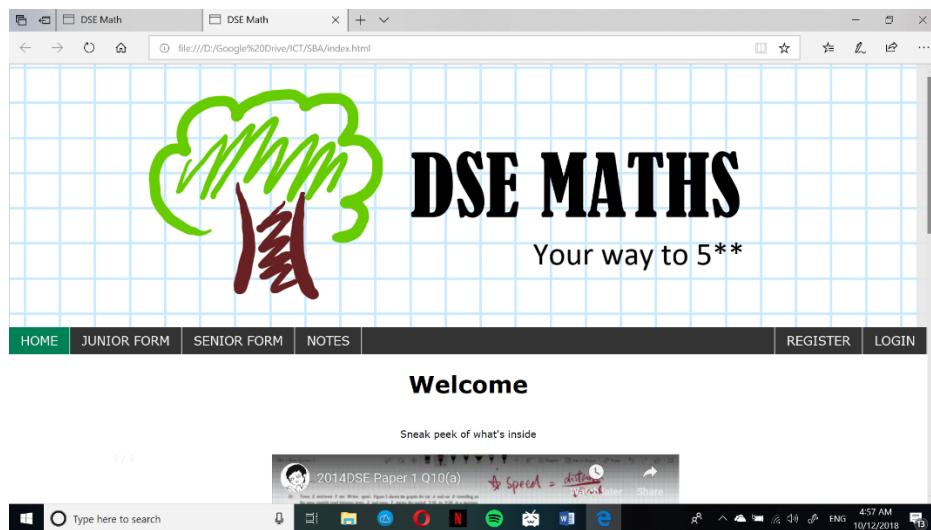
In order to not cause inconvenience to users when using the site, it is important to check that the site does not contain serious bugs when using. Several functions and areas are tested to make sure they work properly.

Testing area	Results, works?	Remarks
Navigation bars	✓	
Navigation buttons	✓, but the buttons on content pages can still be clicked even when they do not redirect to other pages.	Has been fixed by CSS codes. [pointer-events: none;]
Videos	✓	
Self-test (Scratch)	The timer doesn't work properly. The marks are not calculated correctly.	Has been fixed.
Self-test (Form)	✓	
Notes	✓	
Login	✓	
Register	On home page, the box cannot be dismissed with any clicks outside of the box.	
Feedback form	✓	
Email link	✓	
Carousel	✓	

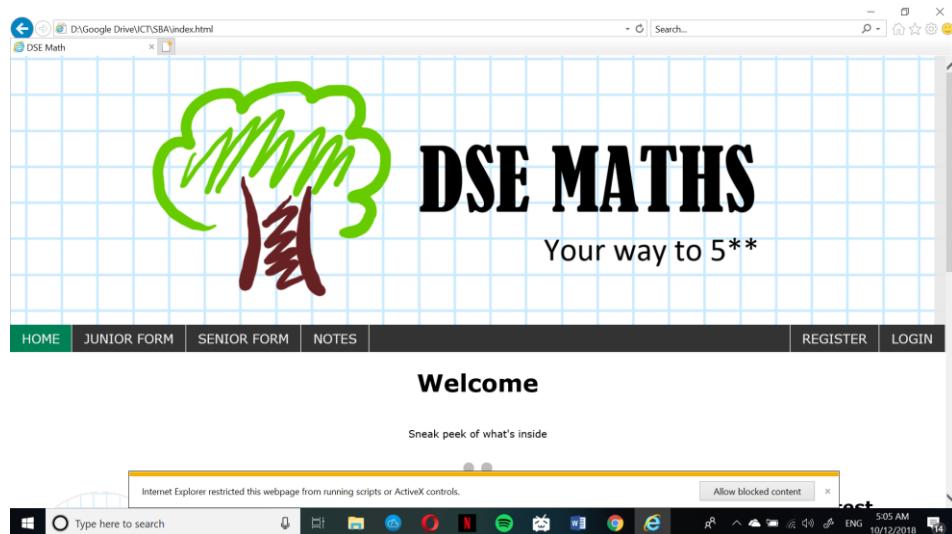
Specific testing area: accessibility and navigation

Accessibility and navigation of a website is always an important aspect. In order to keep returning users, it is important to have superb accessibility and smooth navigation.

The site is first tested on different browsers on a computer (iPad and pc). Results show that the site is displayed correctly on different browsers including Microsoft Edge, Internet Explorer, Opera, Google Chrome and Safari.



Microsoft Edge



Internet Explorer, however users have to allow ActiveX controls to display everything correctly, including the home page carousel.

The screenshot shows a web page titled "Self Test on Permutation, Combination and Probability". The page has a navigation bar with "HOME", "JUNIOR FORM", "SENIOR FORM", "NOTES", "REGISTER", and "LOGIN". On the left, there's a sidebar with "Pre-DSE speed practise on Trigonometry and Geometry MC" and "Self Test on Permutation, Combination and Probability" sections, along with email and feedback links. The main content area contains a question about probability and three input fields labeled (a), (b), and (c) with answers 123, 56543, and 431431 respectively. A "Try again!" button is visible above field (b). A "Check your answers" button is at the bottom. The status bar at the bottom shows the date and time as 10/12/2018 5:09 AM.

Google Chrome, the site displays correctly and validation works fine.

The screenshot shows a web page titled "Last minute notes for Trigonometry". The page has a navigation bar with "HOME", "JUNIOR FORM", "SENIOR FORM", "NOTES", "REGISTER", and "LOGIN". On the left, there's a sidebar with "Last minute Trigonometry" section, email, and feedback links. The main content area shows the title "Last minute notes for Trigonometry" and a "Download" button. Below it is a large black rectangular area containing trigonometric identities. The status bar at the bottom shows the date and time as 10/12/2018 5:11 AM.

Opera, it is display perfectly and the notes can be previewed correctly.

DSE MATHS
Your way to 5**

Welcome

Sneak peek of what's inside

DSE 2014 P1 Q6

(a) Selling price = $255 \times (1-40\%)$
 $= 255 \times 60\% = \$153$

(b) the cost = $\frac{153}{1.02} = \$150$
 $\text{selling price} = \$150 + \$2 = \$152$

DSE question on percentage

Who are WE?

We are a self-learning website created for students in the DSE curriculum, specialized in DSE Mathematics. We understand the struggle of going to school and tutorials

Latest News

New Self Test on Permutation, Combination and Probability

DSE2014 - Speed Graphs

Why spend time on easy Junior Form questions?
 Simply because it helps with your grades! Do you know that if a Form 3 student take the DSE Math exam, they are likely to get a level 2?
 Junior Form questions help you get marks easier, secure you base marks.
 So, let's dive into today's question - DSE 2014 Paper 1 Section A Q10, a graph question.

Speed = $\frac{\text{distance}}{\text{time}}$

speed for A = 80 km

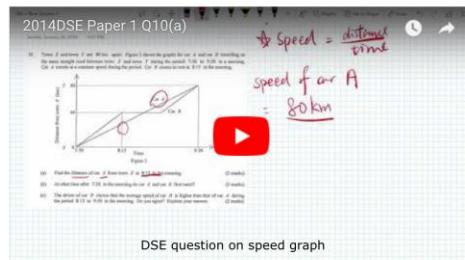
Safari on iPad. In portrait mode, it is clear that on the home page, some content is shifted to the right. In the content pages, the working space is very limited.

iPad 05:18 eclass.uccke.edu.hk 33%

HOME JUNIOR FORM SENIOR FORM NOTES REGISTER LOGIN

Welcome

Sneak peek of what's inside



Who are WE?

We are a self-learning website created for students in the DSE curriculum.

Latest News

New Self Test on

iPad 05:18 eclass.uccke.edu.hk 33%

HOME JUNIOR FORM SENIOR FORM NOTES REGISTER LOGIN

Junior Form

DSE 2014 - Speed Graph

DSE 2014 - Percentage

Email: s131118@eclass.uccke.edu.hk

Feedback

By Grace Li

Why spend time on easy Junior Form questions?

Simply because it helps with your grades! Do you know that if a Form 3 student take the DSE Math exam, they are likely to get a level 2?

Junior Form questions help you get marks easier, secure your base marks.

So, let's dive into today's question - DSE 2014 Paper 1 Section A Q10, a graph question.

Safari on iPad. In landscape mode, the content are in place and the working space is sufficient.

Therefore, it is concluded that different browsers on a laptop, desktop or a tablet, the site can be displayed correctly and allow different users to use the site.

The site is then tested on mobile devices.

Opera Touch on Android device. It is obvious that the top navigation bar is squeezed to two rows, content is shifted, and in the content pages the working space is clearly not enough for users to read correctly. However the navigation is still clear and useable.

It is concluded on a mobile, users cannot use the site correctly.

Major change

Add a mobile site

It is discovered that the site cannot be displayed correctly on a mobile device. The navigation bar is squeezed into two rows that is unable to read and the side navigation bar makes the working area extremely small.

As such, a mobile site is added to the site to enable a smooth navigation on mobile sites and better access of the site on mobile devices (detailed description is in the section above the testing section).

The image shows a comparison between a mobile browser view (left) and a desktop browser view (right) of the DSE MATHS website.

Mobile View (Left): The mobile version has a top navigation bar with icons for social media and a search bar. Below this is a header with a logo of a green tree and the text "DSE MATHS Your way to 5**". The main menu is at the bottom, featuring "HOME" (highlighted in green), "JUNIOR FORM", "SENIOR FORM", "NOTES", "REGISTER", and "LOGIN". A large "Welcome" heading is centered below the menu. A "Sneak peek of what's inside" section displays a math question from the 2014 DSE Paper 1 Q10(a). The question asks for the distance of car A from time 8:15 to 9:00, given a graph showing distance vs. time for two cars, A and B. The graph shows a straight line for car A and a curved line for car B. A red play button icon is overlaid on the graph area. Below the graph are three questions related to the graph.

Desktop View (Right): The desktop version has a top navigation bar with a URL and icons. Below this is a header with the "DSE MATHS" logo and the tagline "Your way to 5**". The main menu is on the right, with "HOME" (highlighted in green), "JUNIOR FORMS", "SENIOR FORMS", and "NOTES" below it. A large "DSE 2014 - Speed Graph" heading is centered below the menu. To the right of the heading is a text block explaining why junior form questions help with grades. Below this is a "Click [here](#) if you experience difficulties watching the video" link, followed by a video player showing a video titled "2014DSE Paper 1 Q10(a)".

Before(left) and After(right). It is much easier to navigate and the working space is sufficient. Mobile users can be directly redirected to the mobile site on load.

Content

[DSE 2014 - Speed Graph](#)

[DSE 2014 - Percentage](#)

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[Feedback](#)
[Desktop version](#)

Evaluation

After the testing stage performed solely, a questionnaire is given to a number of users through Google Forms to help with evaluating in the real world, to know if users really think that the site is useful and useable. There is also a feedback collection section in the site to constantly receive feedback from users for further improvements.

Questionnaire Sample

(<https://goo.gl/forms/telowF49tDy0jYzC2>)

<p>Test and Evaluation for self-learning (ICT SBA) website</p> <p>* Required</p> <p>Rate the whole site *</p> <p>1 2 3 4 5</p> <p>Very Good <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> (✓Д)</p> <p> <u> </u></p> <p>Does the site help with your studies? *</p> <p>1 2 3 4 5</p> <p>Solid Yes <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Solid No</p> <p>Which feature do you like most? *</p> <p><input type="radio"/> Videos <input type="radio"/> Self-test on MC <input type="radio"/> Self-test on structured question <input type="radio"/> Notes <input type="radio"/> Login <input type="radio"/> Other:</p>	<p>Anything need to be changed in the home page?</p> <p>Your answer</p> <p>Is the navigation system clear? *</p> <p><input type="radio"/> Yes <input type="radio"/> No</p> <p>Rate the navigation system. Is it easy to use? *</p> <p>1 2 3 4 5</p> <p>Very Good <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very Bad</p> <p>Are there anything that you think should be changed in the navigation system?</p> <p>Your answer</p> <p>Are there anything that you think should be changed in the content pages?</p> <p>Your answer</p> <p>Rate the self-tests</p> <p>1 2 3 4 5</p> <p>Very Good <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> Very Bad</p> <p>Are there changes that should be made to the self-tests? How may we change?</p> <p>Your answer</p>
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Are the login/registration instructions clear? If no, please point out your difficulties in the others column.

yes

no

Other:

Rate the login system

1 2 3 4 5

Very Good Very Bad

Are there anything you think has to be changed for the login system?

Your answer

Were you able to load the mobile version correctly?

Yes

No

Rate the mobile version of the site.

1 2 3 4 5

Very Good Very bad

Is the navigation system clear and easy enough?

yes

no

Are there any changes needed to be made to the mobile version?

Your answer

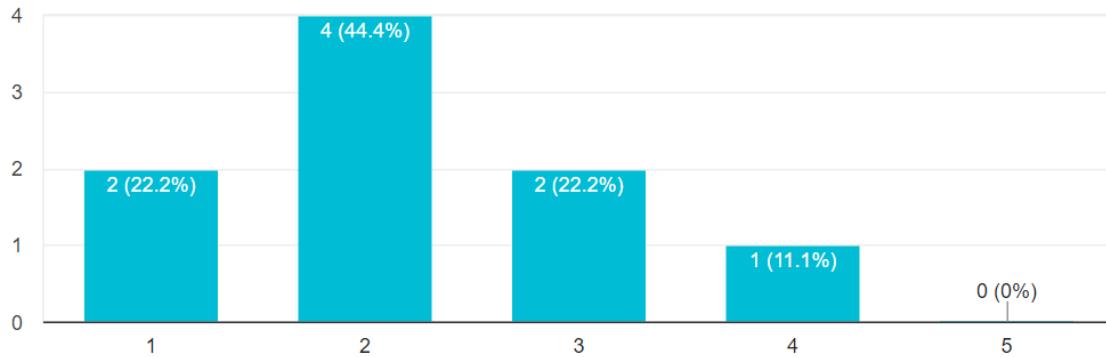
The questionnaire aims to know what the users actually feel about the site and hopefully make improvements.

Results and analysis

Rate the whole site



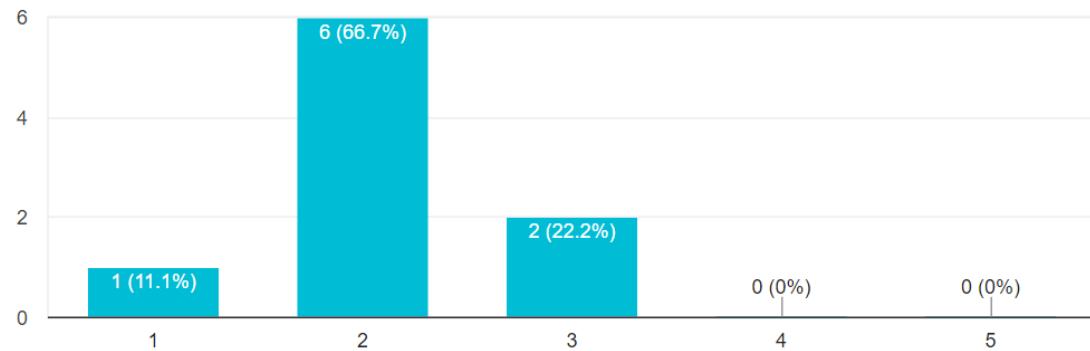
9 responses



In nine responses, most users agree that the site is good. (1 is very good and 5 is not)

Does the site help with your studies?

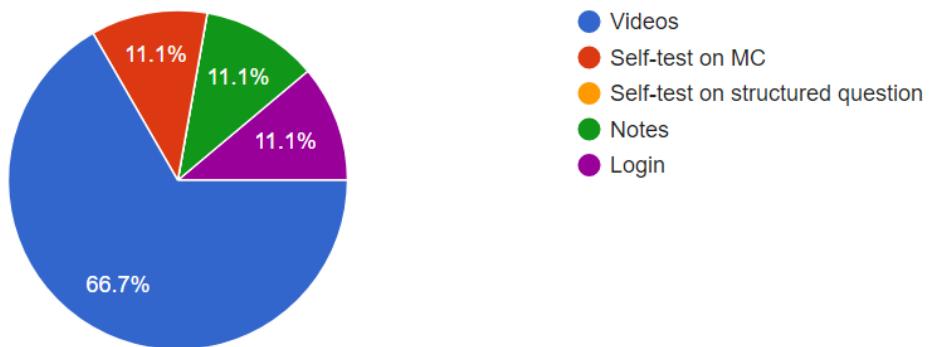
9 responses



It is understood that users do think that the site is useful with their studies, with 7 respondents saying yes. (1=yes, 5=no)

Which feature do you like most?

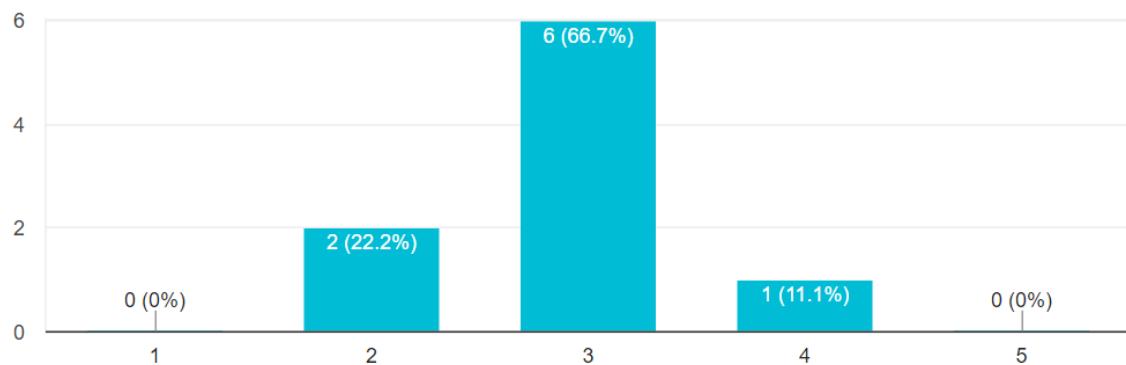
9 responses



It is found that users enjoyed the tutorial videos most out of the features included.

Rate the self-tests

9 responses

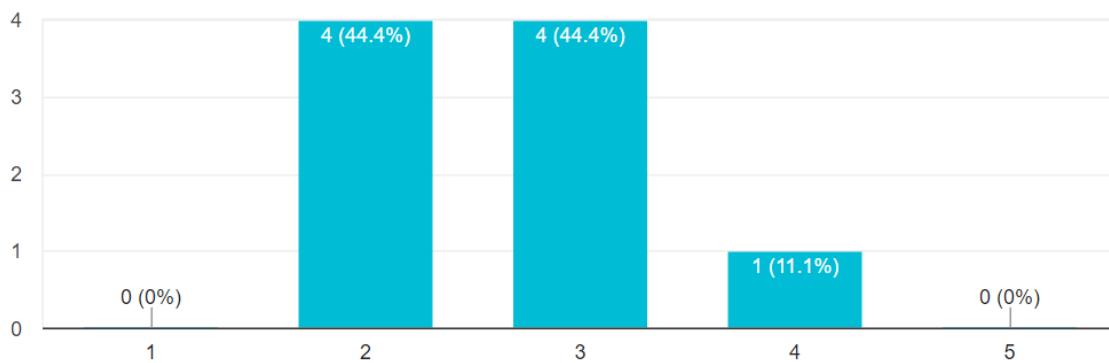


It is also found that users did not enjoy the self-tests much.

Users stated that the test did not show the correct answers, can avoid using flash by using validation (fixed value check), and can be more appealing.

Rate the login system

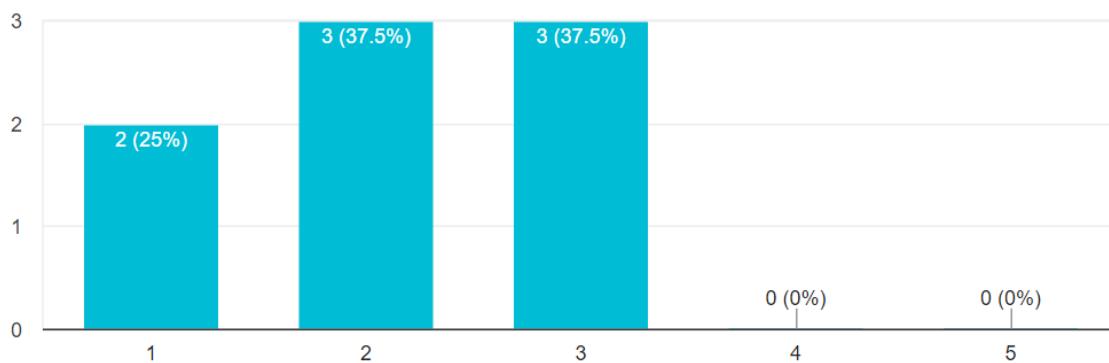
9 responses



The login and registration system is considered to be fairly good. Some suggested that verification should be implemented when users register their accounts, for the password the site should let users input twice to ensure it is correct.

Rate the mobile version of the site.

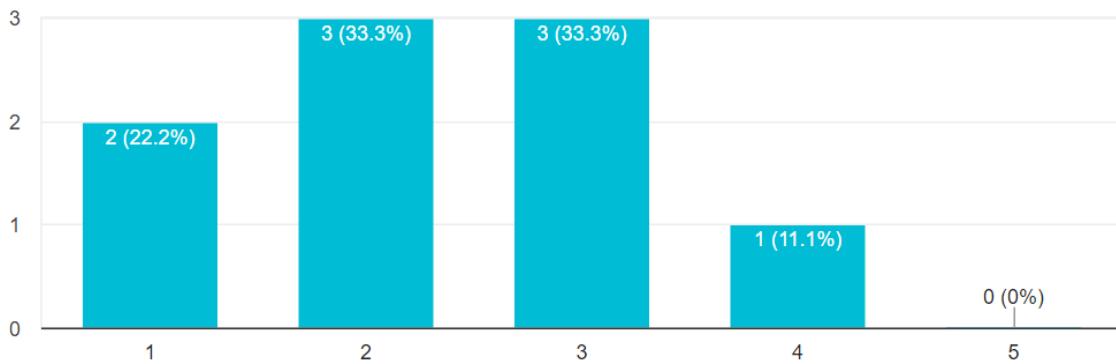
8 responses



The mobile site is also considered to be fairly good. However users have suggested that they would like to include the login system in the mobile site and that it can only be accessed through the home page.

Rate the navigation system. Is it easy to use?

9 responses



The navigation is said to be decent. However, users stated that the topics should be able to be accessed directly and the home button on the home page is not working properly. It is also suggested to include a sitemap for an overview.

Evaluation and Future Development

In general, the site is said to be good. However, some minor changes can still be made to better suit user's needs.

Home page

The minor mistake in the home page navigation bar should be fixed. Apart from that, users have stated that the carousel on the home page with videos cannot work as the videos cannot be paused or watched continuously in the page. The carousel is to be made still when the videos are playing in the future for better user experience.

It is also said that the carousel will cover the navigation bar as it overlays. This problem should also be fixed so the navigation bar is not affected by elements on the page.

Content pages

From the above results from the questionnaire, it is clear that users are satisfied with the tutorial videos. In the future when enriching the site, more tutorial videos can be made.

As for the self-tests, they are to be made more appealing, easier to use and avoid using flash. To tackle the problem, simple HTML techniques should be used in future self-tests and the answers should be displayed or can be found by users to check answers conveniently. Graphics and better design should also be implied.

For notes, the majority of users also enjoyed as such more can be produced.

Login and registration system

Upon request and suggestion, when registering, users are to be asked to input the password twice for better data verification in the future. It should also be introduced to the mobile site for users to track their progress in a mobile device.

In the future, the site should also be able to record user's marks in the site for a better tracking system, along with a personal profile system.

Mobile site

As the current mobile site can only be accessed through the home page, a link to the mobile version should be included in the footer in every page. Login should also be introduced to the mobile site.

References

W3School	w3schools.com
Stack Overflow	stackoverflow.com
Khan Academy	www.khanacademy.org
HKEAA	www.hkeaa.edu.hk/en/
HKDSE 2013-16	Published by HKEAA
CSS Tricks	css-tricks.com

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