Task 1: Creation of website prototype

Read the following information and complete the series of activities that follow

Happy Hikers

Late 2009 Harvey Harrington, a keen hiker from Hamilton visited Queensland to attend a conference for those interested in hiking. While on his trip he met with a group of other hiking enthusiasts who, along with Harvey, discussed everything they knew and loved about hiking over the 3 days.

Since the conference the hikers have kept in touch via an email distribution list and have continued to share everything they know about hiking in Australia. This list has slowly grown to over 500 members. The email network is currently being used to share ideas for hiking trips, maps for hikes, photos, stories and must have equipment. However a number of people have mentioned to Harvey that the list is becoming overused with an ever increasing amount of emails being sent daily. People have said that they would like the ability to filter the information that comes through into categories, so that they can focus on the content they are interested within. This is not currently something that the email service provides as all users receive all emails, regardless of the topic. Harvey has also noticed that he seems to be spending more and more time, adding users to the distribution list that he manages and co-ordinating many of the emails and information that is sent.

In early 2012, Harvey took the next big step in his professional career buying a camping and adventure store, providing him with a nice steady income. As a result he has begun to think that he would like to be the one to modernise the hiking network by introducing a new online community.

With this in mind, Harvey has asked you to design him a prototype website which will have the look and feel of the actual website including links, user interface but with limited functionality. Some features may be simulated as it only needs to demonstrate what is possible. Upon delivery of the prototype he may green light production of the actual product; however this is beyond the scope of the current contract with Harvey.

In recent months Harvey has heard a lot about web 2.0 tools like forums, blogs, wikis, chat rooms and social networking sites as ideal places to gather, organise and distribute information. He has decided that he would like to incorporate appropriate tools into his website to allow users to;

- Meet online, socialise with fellow hiking enthusiasts, discuss hiking matters, show of hiking photos and videos, contribute hiking stories and review new equipment.
- Register and develop their own profile pages and even meet 'hiker friends'

He recognises the necessity to attract teenagers and young adults to the community to continue to develop and build the community into the future. He is also aware of how popular and appealing social networking sites are to younger people and he would like to incorporate some of these interactive features to attract a young audience.

In short, he wants his website 'Happy Hikers' to be user friendly, visually appealing and the number one place for hiking enthusiasts throughout Australia.

Analysis   8 marks

1. Provide a brief overview of the online community, including its purpose, function and goals.
2. Consider the problem facing the online community and provide a problem statement
3. Identify the type/s of website/tools required referring to the information needs of the online community. For each website/tool explain what role it will play in the solution
4. When planning the website, what might Harvey need to consider in terms of copyright, information privacy, protection of minors, spam, culture and human rights
5. Identify any technical or non-technical constraints.
6. Identify the input and output requirements of the website
7. Describe the benefits of the website for the online community.

Design   12 marks

1. Using as many different design tools as you see appropriate, represent the functionality and appearance of the prototype website. Blank A4 paper and templates will be supplied for this.
2. Consider the design elements to be used that will influence the functionality and appearance of the website

Development   20 marks

1. Develop a prototype website using web-authoring software as identified in the design brief, clearly showing a range of online community tools such as blogs, wikis and discussion forums. The online community tools do not have to be functional, but the student should communicate clearly how they might be used and where they would be located within the prototype website. Additional software may be used if required. (e.g image editing)

2. Apply a range of manual and electronic validation techniques. Provide a range of annotations to show that you have used appropriate manual and electronic validation techniques.
3. Apply appropriate formats and conventions to produce an effective solution. Provide a range of annotations to show that you have used appropriate formats and conventions.
4. Use appropriate test data to test all features of the website. Record the results in a test table.

What is to be tested	Test data to be used	Expected result	Actual result	Corrections made

Task 2: Written Report (10 Marks)

Develop your report on separate sheets provided. Your report is likely to be in the range of 250 – 300 words.

Your prototype site has been accepted by Harvey and it has been developed into a fully functional website. Before it goes online, Harvey would like a written report explaining further about online communities and hosting requirements in general. He has asked to be briefed on the following;

1. Justify how your prototype website suits the needs of the online community 'Happy Hikers' (5 marks)
2. What hardware/software, communication links and online services are required in order to make the site work online (5 marks)