Assessment and Study Habits

Oliver Au
oau@ouhk.edu.hk

Computing, The Open University of Hong Kong

http://ouhk.seprofession.com/

Unit Objectives

This unit

1. informs you how you will be assessed in this course
2. explains
   - your group project topic
   - how to form your project team poised for success
   - basic attributes of a good product
3. helps you distinguish good and bad study habits
4. suggests you to improve habits with the PDCA loop

Outline

COMP S356F Activities and Dates

Assessment Activities	**Weight**
Online quizzes in lectures	2
2 term tests	10
4 demonstrations of your group project $(4 + 4 + 4 + 6)$	18
Final examination	70
Total	100

Important Dates

Dates	**Activities**
Week of 2015-10-19	Demonstration 1
2015-11-30	Term test 1
Week of 2015-12-07	Demonstration 2
Week of 2016-03-07	Demonstration 3
2016-03-21	Term test 2
Week of 2016-04-25	Demonstration 4

Dr Yingchao Zho will announce different mark distribution and dates for COMP S350F students.

COMP S356F Activities and Dates

Assessment Activities	Weight
Online quizzes in lectures	2
2 term tests	10
4 demonstrations of your group project (4 + 4 + 4 + 6)	18
Final examination	70
Total	100

Important Dates

Dates	Activities
Week of 2015-10-19	Demonstration 1
2015-11-30	Term test 1
Week of 2015-12-07	Demonstration 2
Week of 2016-03-07	Demonstration 3
2016-03-21	Term test 2
Week of 2016-04-25	Demonstration 4

Dr Yingchao Zho will announce different mark distribution and dates for COMP S350F students.

OUHK requires undergraduate students to attend at least 80% of the classes. I will not pass around a paper for you to tick beside your name because too many students cheat. You will prove your attendance by taking online quizzes in class. I can restrict the online quizzes to people connected through the IP of our university WiFi during lecture time. According to the regulation, you can fail this course for skipping more than 20% of the classes.

Four demonstrations throughout two terms are more work for students and teachers than a single demonstration at the end of the course. But students can learn from each other and improve with each practice.

Some students complained that the group projects are too much work for 20 marks allocated. These students did not understand that group projects let them practice the theoretical knowledge and gain a better understanding. The goal of education is to change the way you think and do things. It is not about the piece of work you do. It does not matter if your product will not be used by many people or that your project is not worth many marks. The key is for you to learn while creating the product.

Choosing Topic and Forming Team

- You will form a team. The team size should be 5 or 6 students.
- Each team will create a software application that meets the learning needs of some people. Examples:
  - Students in grades 5 and 6 to learn English.
  - Beginners to learn to read music.
- If your group has a bright project idea that is not related to education, you can discuss with your tutor or me for approval of a project topic outside of educational tool.
- Your final product should run on a computer, a smart phone or both.
- If you have a good team, I encourage you consider to enter these two contests. If you receive some recognition, you will have an improved chance to win a scholarship worth tens of thousand dollars in your final year of study. Tell me your intention to enter by mid-October.
  - Collegiate Contest of Educational Technology (CCET) - **team size is limited to 5**
  - ASEAN Undergraduate Conference in Computing (AUCC) `http://www.aucc-con.org/aucc2015/`

Choosing Topic and Forming Team

- You will form a team. The team size should be 5 or 6 students.
- Each team will create a software application that meets the learning needs of some people. Examples:
  - Students in grades 5 and 6 to learn English.
  - Beginners to learn to read music.
- If your group has a bright project idea that is not related to education, you can discuss with your tutor or me for approval of a project topic outside of educational tool.
- Your final product should run on a computer, a smart phone or both.
- If you have a good team, I encourage you consider to enter these two contests. If you receive some recognition, you will have an improved chance to win a scholarship worth tens of thousand dollars in your final year of study. Tell me your intention to enter by mid-October.
  - Collegiate Contest of Educational Technology (CCET) - **team size is limited to 5**
  - ASEAN Undergraduate Conference in Computing (AUCC) `http://www.aucc-con.org/aucc2015/`

Can you form a group with friends in another tutorial? It may be infeasible because the tutorial could already be full so physically there is no room for additional students. If it is absolutely important for you to join friends in another tutorial but you cannot officially change tutorial, please talk to me about your special case.

I am involved in the two contests. CCET will be held in Hong Kong. Your project topic must be an educational tool. You will be competing with teams from other institutions in Hong Kong. The top 3 to 5 finishing teams will be invited to send two members to present their products at Peking University on July 19 to 21 in the ICHL 2016. The two members will receive a total sponsorship of HK $20,000. After paying for HK $6,000 conference registration fees for two persons, airfare and hotel, they should have a few thousand dollars to spend on anything they choose.

AUCC is an annual conference held in Thailand. **The project topics are unrestricted.** You will be competing with Thai students. If you click last year's conference link above, you may see me wearing an orange conference t-shirt. The organiser covered our registration, food, accommodation, local transportation and sightseeing. Our students had a great time. We also won the best paper award in the English category.

The portrait of a successful software project team

- Find members eager to contribute with complementary skills
- Choose a group of target users to meet their needs
- Start with a good search of existing products serving a similar purpose
- Do not procrastinate at the beginning; follow teachers' advices weekly
- Engage prospective users early to see if your product is useful

The characteristics of a great software product

- Have many useful features; some should be innovative
- Attractive UI or entertaining to use (gamification)
- Easy-to-learn UI; once learned productive to use
- Apply SE techniques to improve software quality

The portrait of a successful software project team

- Find members eager to contribute with complementary skills
- Choose a group of target users to meet their needs
- Start with a good search of existing products serving a similar purpose
- Do not procrastinate at the beginning; follow teachers' advices weekly
- Engage prospective users early to see if your product is useful

The characteristics of a great software product

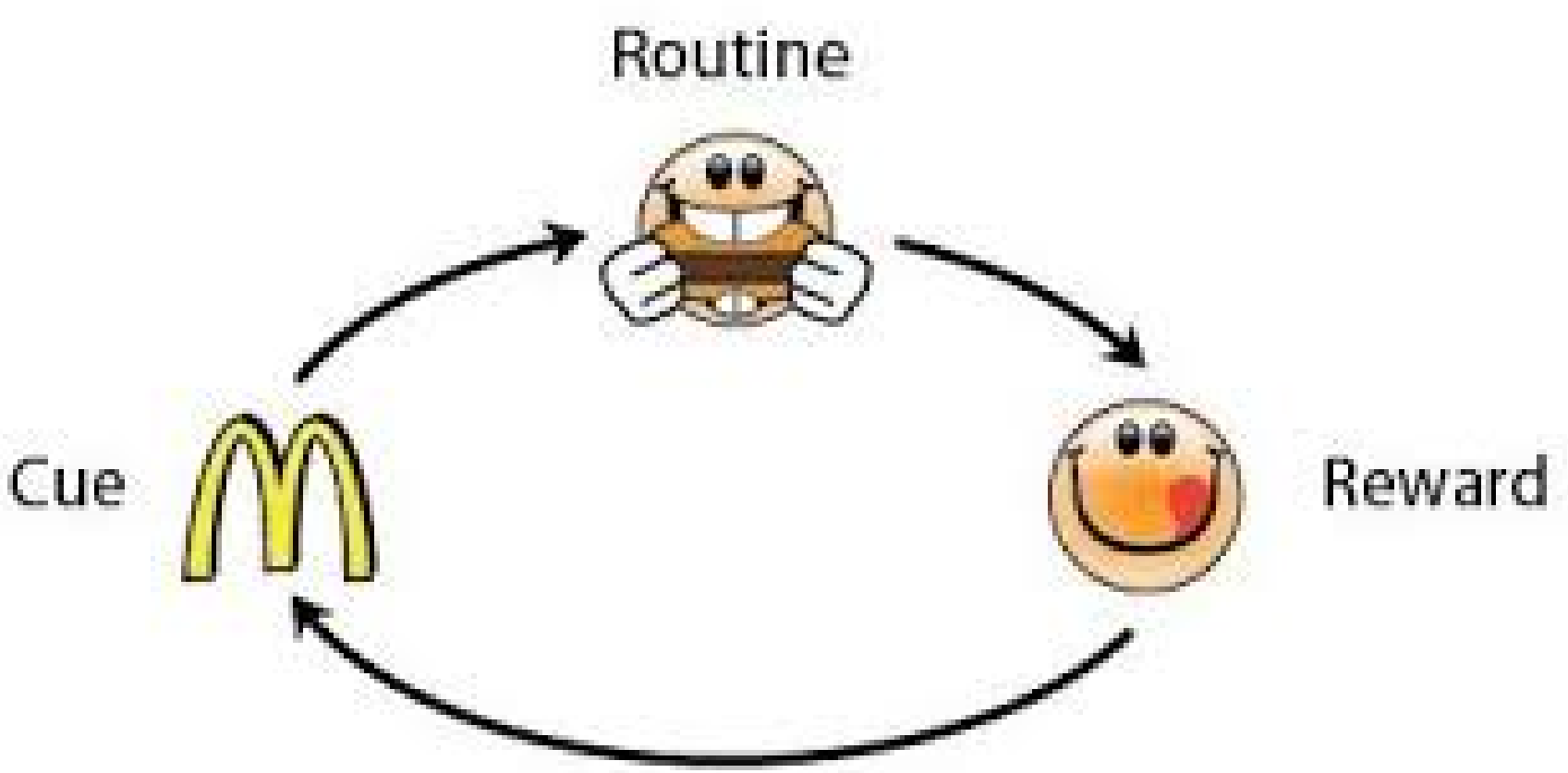
- Have many useful features; some should be innovative
- Attractive UI or entertaining to use (gamification)
- Easy-to-learn UI; once learned productive to use
- Apply SE techniques to improve software quality

The best project team should contain complementary skills from members. For example, it may not be necessary or even desirable for ALL members to be strong programmers. You may also want someone to be good at design UI.

Gamification attempts to design educational software to allow users to have fun while using the tool to learn or do productive work. Effective gamification applied on educational software encourage user to use it more often in an engaged manner. It should produce desirable learning otucomes.

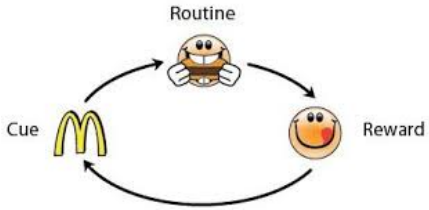
How habits are formed?

- A habit is a recurring action.
- *We are what we repeatedly do. Excellence, then, is not an act, but a habit.* Aristotle.



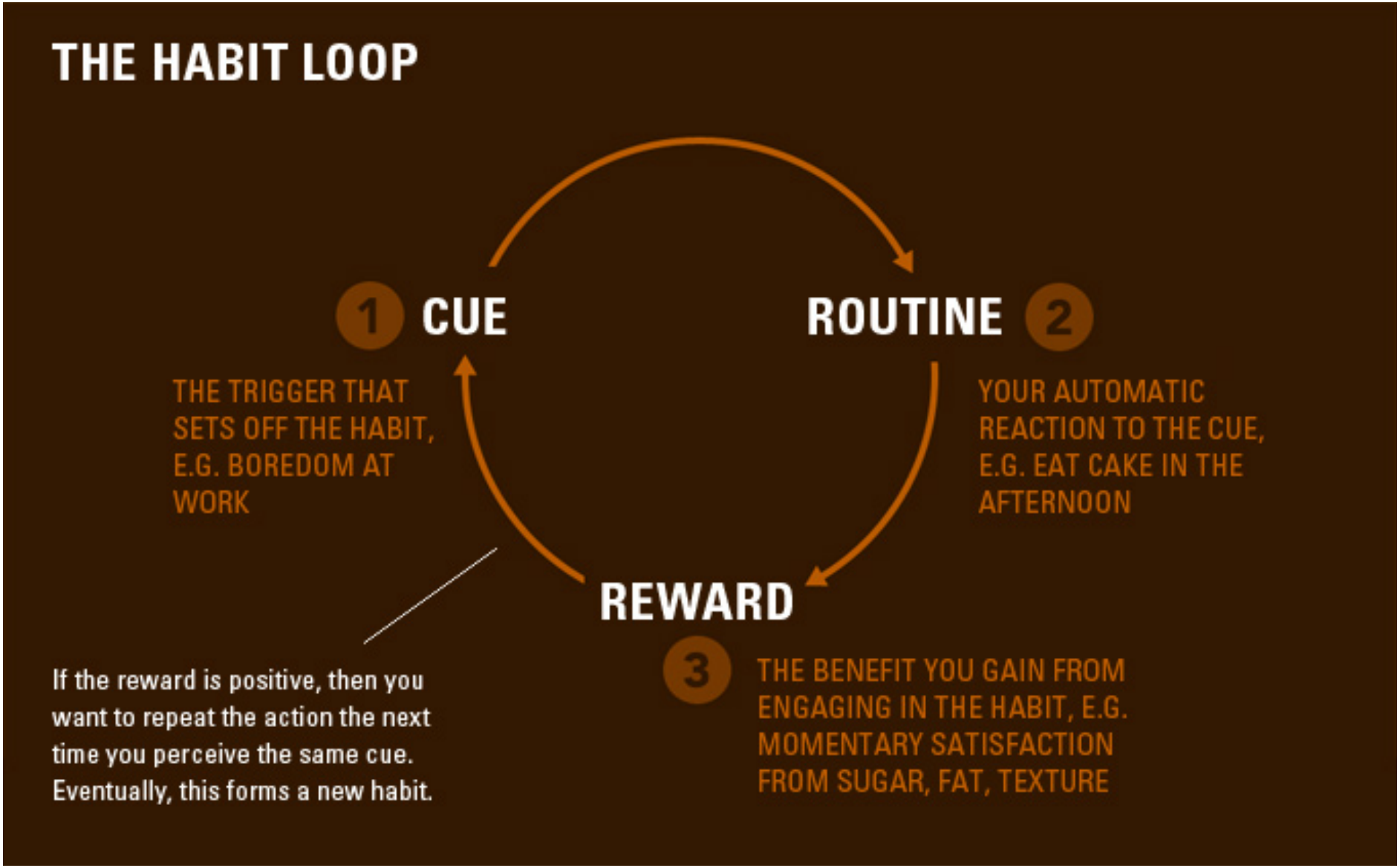
How habits are formed?

- A habit is a recurring action.
- *We are what we repeatedly do. Excellence, then, is not an act, but a habit.* Aristotle.



Given their repeating nature, habits can have an enormous effect on a person. It is therefore important for you to have more good habits and fewer bad habits. Charles Duhigg wrote the book *The Power of Habit: Why We Do What We Do in Life and Business*. He proposed the habit loop to describe how we repeat a routine.

Normally, there is a cue to remind us. The habitual cue can be in one of five categories: location, time, emotional state, other people and actions. For some people, the Big M sign reminds them to eat. Eating can make them feel good. The next time they see the Big M, they will be more inclined to walk in the restaurant.


THE HABIT LOOP
1 CUE
THE TRIGGER THAT SETS OFF THE HABIT, E.G. BOREDOM AT WORK
ROUTINE 2
YOUR AUTOMATIC REACTION TO THE CUE, E.G. EAT CAKE IN THE AFTERNOON
REWARD
3
THE BENEFIT YOU GAIN FROM ENGAGING IN THE HABIT, E.G. MOMENTARY SATISFACTION FROM SUGAR, FAT, TEXTURE
If the reward is positive, then you want to repeat the action the next time you perceive the same cue. Eventually, this forms a new habit.

Bad habits in classrooms

- Cue 1 = With friends, Cue 2 = Teacher speaks
- Routine = Talk, Reward = Not bored during the lecture
- The above student chose short-term rewards over long-term rewards.
- Many people thought they are good at multitasking. You can only multitask well if the tasks are not challenging.
- Talking in class shows disrespect for others especially the teacher

- Cue 1 = With friends, Cue 2 = Teacher speaks
- Routine = Talk, Reward = Not bored during the lecture
- The above student chose short-term rewards over long-term rewards.
- Many people thought they are good at multitasking. You can only multitask well if the tasks are not challenging.
- Talking in class shows disrespect for others especially the teacher

Students who perform poorly often have the habit of not paying attention in class. One cue is being surrounded with friends. If this cue is not strong enough, another cue is the teacher starts lecturing. The reward is not being bored by the lecture.

Some students chose the short-term reward of talking in class over the long-term reward of learning and have a good job in the future. Changing habit is difficult. Most smokers should know smoking is bad for them but few break the habit. If you want to change from a poor student to an effective student. You need to take a good look at your study habits. Change the bad ones to good ones. It's not easy and takes great effort.

In and out of classrooms

1. Spend at least 2 hours to study for every hour in the classroom, study within one or two days of the lecture for understanding and memorisation
2. Continuously adapt your study habit to make learning fun
3. You are now motivated
   - extrinsically by the better future and
   - intrinsically by the fun and satisfaction from studying
4. Remove cues that will trigger bad study habit from you
5. Identify distractions during your study to remove them
6. Go to bed early and sleep enough
7. For best results, you must learn consistently week after week throughout the whole term. Don't expect to learn everything the night before the examination. (In the same way, top athletes will not only train the night before the race.)

In and out of classrooms

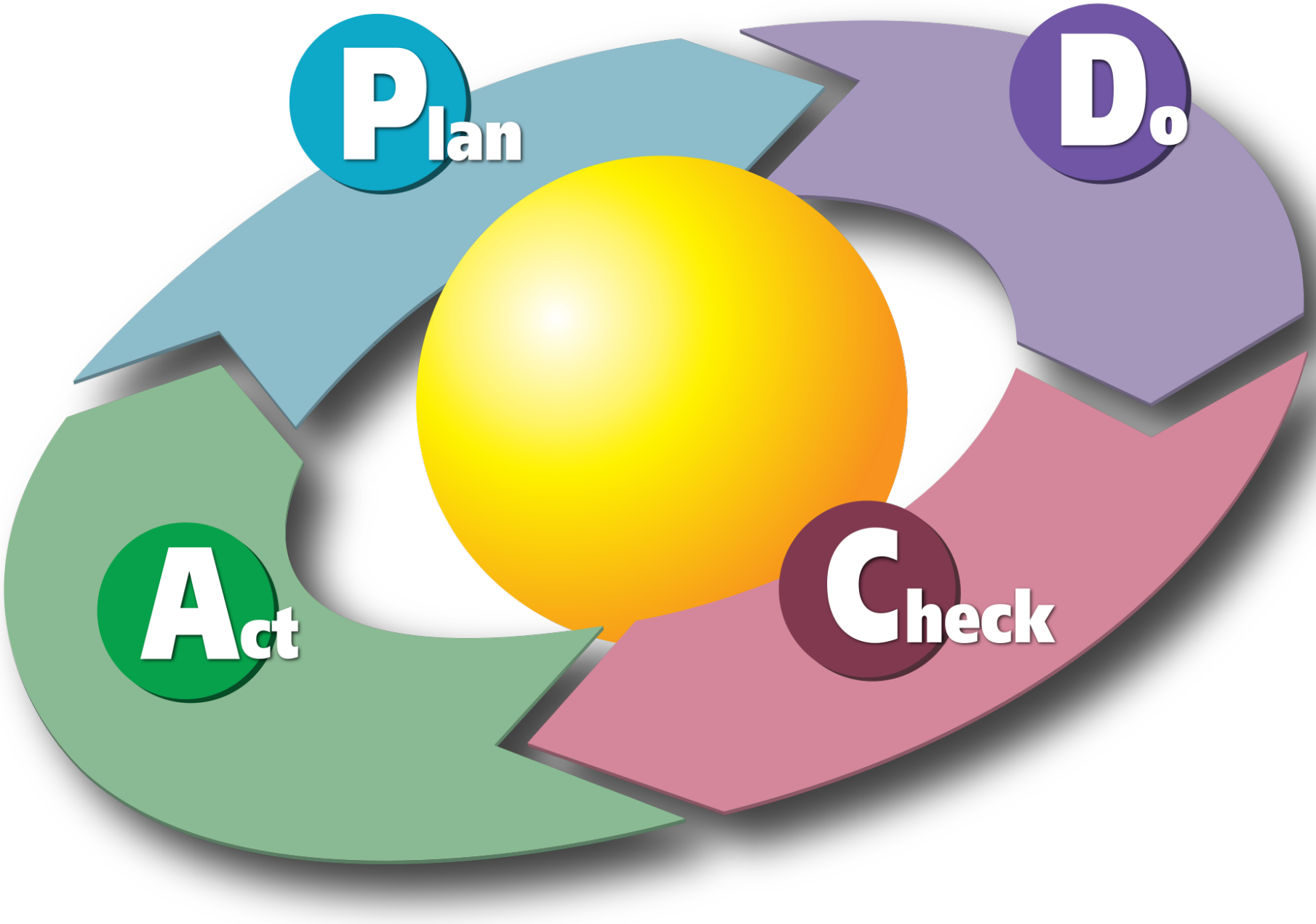
- Spend at least 2 hours to study for every hour in the classroom, study within one or two days of the lecture for understanding and memorisation
- Continuously adapt your study habit to make learning fun
- You are now motivated
  - extrinsically by the better future and
  - intrinsically by the fun and satisfaction from studying
- Remove cues that will trigger bad study habit from you
- Identify distractions during your study to remove them
- Go to bed early and sleep enough
- For best results, you must learn consistently week after week throughout the whole term. Don't expect to learn everything the night before the examination. (In the same way, top athletes will not only train the night before the race.)

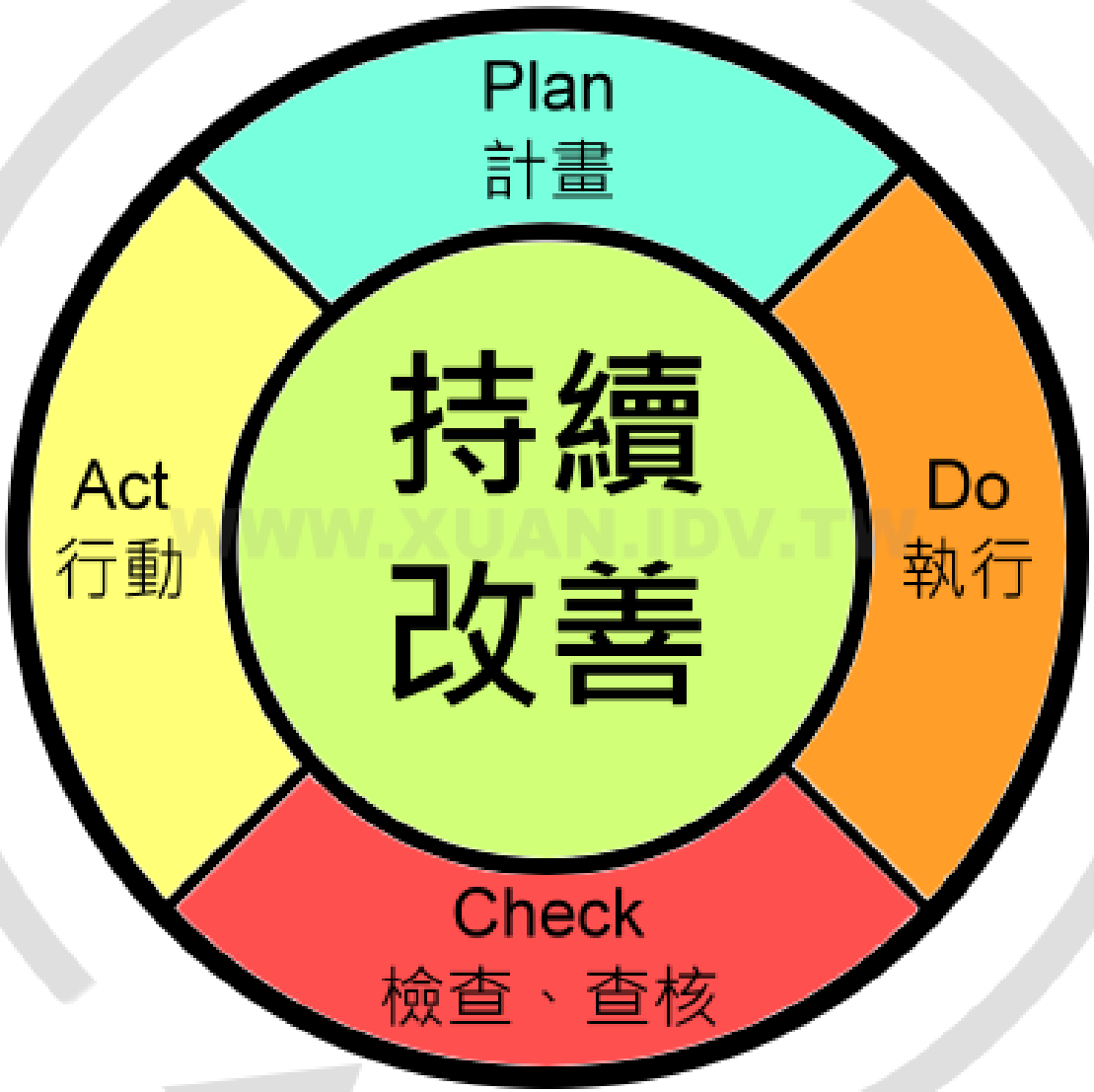
You have 2 hours of lecture and 2 hours of tutorial in COMP S356F. You should spend at least $2 \times 4 = 8$ hours studying or working on your project.

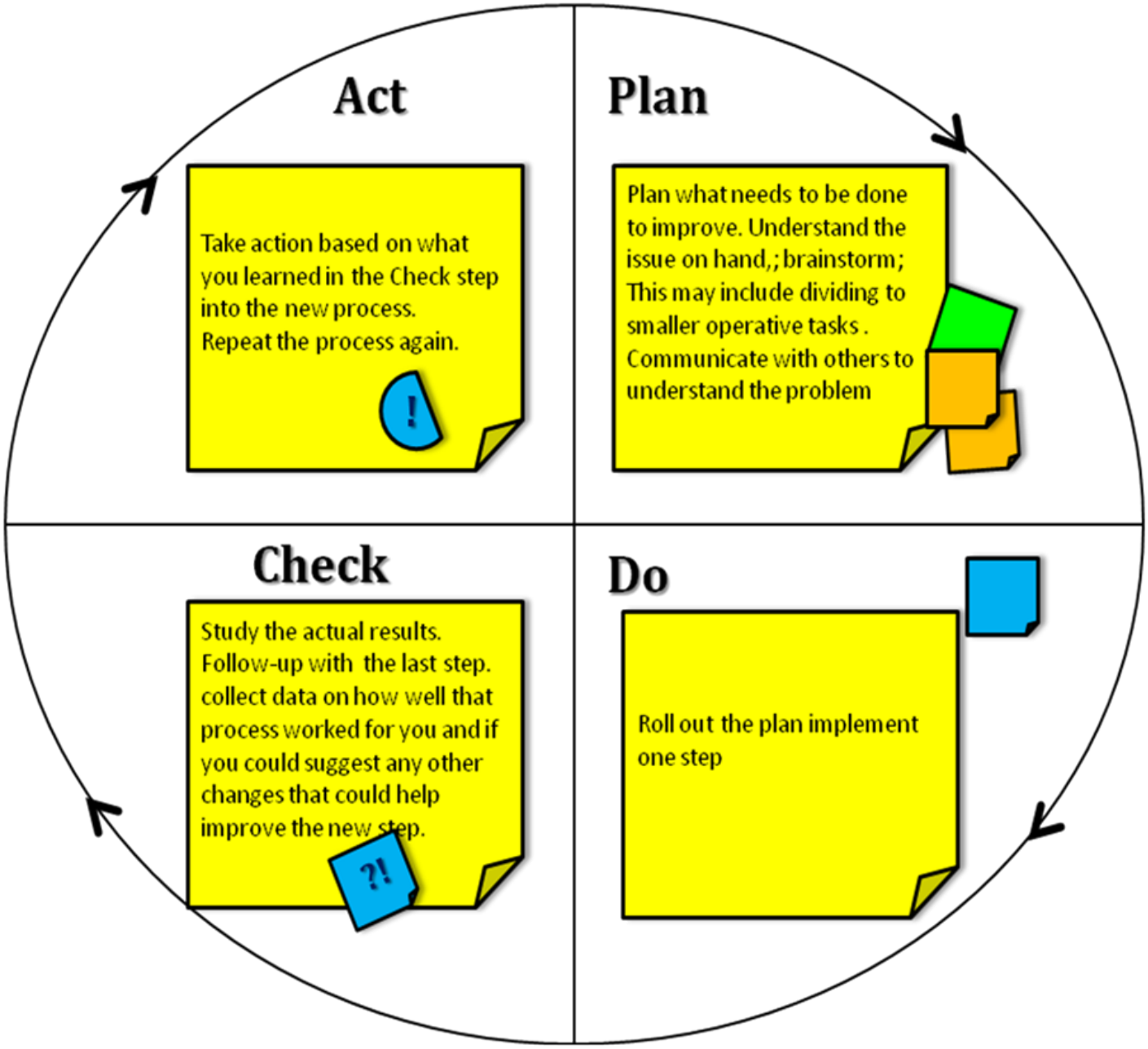
We can be discouraged or bored occasionally. The more motivation we can get, the better. So make learning fun. If you don't spend enough time doing something, you won't get addicted. It is good in some way to get addicted to your work.

A student was caught by me talking in class. It was a repeated offence so I sent him out of the classroom. In later classes, he sat by himself away from his friends to remove the cue of talking in class. He later received the student award as one of two top students in COMP S356F.

Research work tells us that we need good sleep for our brains to organise our knowledge in usable form. This is one of the reasons why it is a bad idea to stay awake all night to study right before the examination.


Plan
Do
Check
Act




Act
Take action based on what you learned in the Check step into the new process.
Repeat the process again.
!
Plan
Plan what needs to be done to improve. Understand the issue on hand,; brainstorm; This may include dividing to smaller operative tasks . Communicate with others to understand the problem
Check
Study the actual results. Follow-up with the last step. collect data on how well that process worked for you and if you could suggest any other changes that could help improve the new step.
?!
Do
Roll out the plan implement one step

Slides, Quotes and Quiz

A Quote on Genius

Genius is 1% inspiration, 99% perspiration

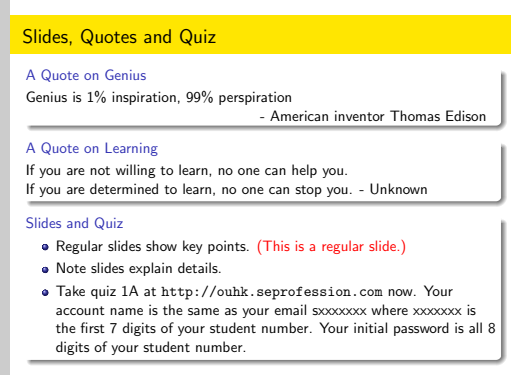
- American inventor Thomas Edison

A Quote on Learning

If you are not willing to learn, no one can help you.
If you are determined to learn, no one can stop you. - Unknown

Slides and Quiz

- Regular slides show key points. (This is a regular slide.)
- Note slides explain details.
- Take quiz 1A at `http://ouhk.seprofession.com` now. Your account name is the same as your email sxxxxxxx where xxxxxxx is the first 7 digits of your student number. Your initial password is all 8 digits of your student number.



We have two kinds of slides. The first kind of slides are the **regular slides** that students expect to see. They contain bullet points, tables and graphics.

The second kind of slides are **note slides**. They contain a miniature image of the previous slide in the top right corner. In fact, this is a note slide. It contains paragraphs of texts that try to explain the key points of the previous slide. It does not have a slide number.

On the first time you study the slides, you should read every slide, regular or note. During revision, you can read the regular slides and skip the note slides. Only if you have forgotten or do not understand the details of a regular slide, you need to read the following note slide. I hope this design helps you understand the materials efficiently.