VIT®

Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

IIP Project Review

Course code : PHY1999

Slots : C2+TC2

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Improvements in FFCS and Summer Semesters
Project Report

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Thank You,

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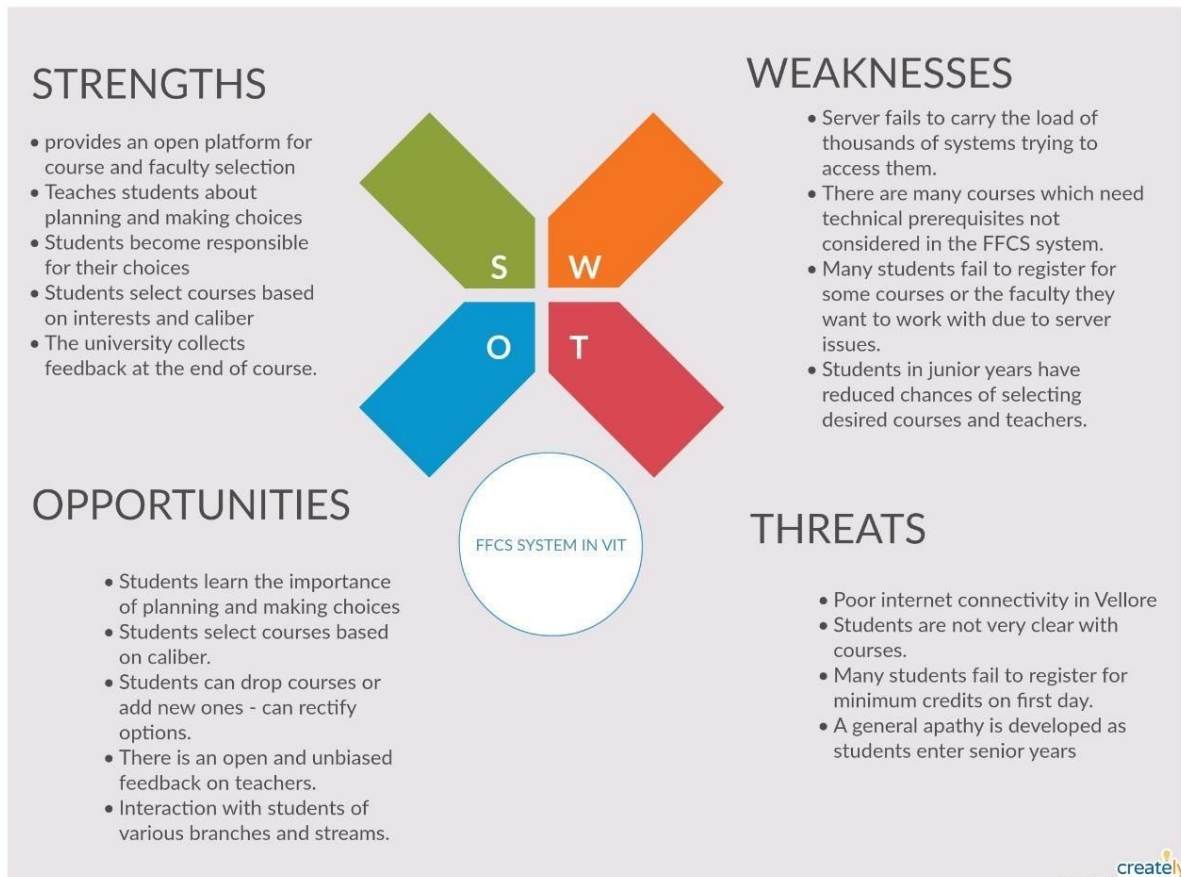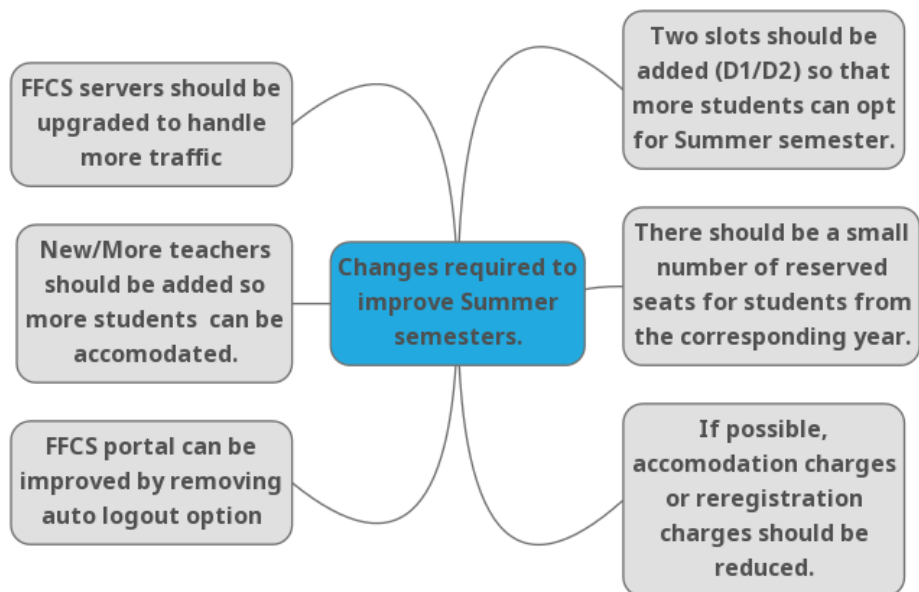
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ABSTRACT

The Vellore Institute of Technology offers a Fully Flexible Credit System for course registration in tis curriculum. It also offers a system of weekend semesters and summer semesters to help clubs complete their activities and students complete their arrears. This in turn helps in a smooth fall and winter semesters. However, several issues like the hanging of servers during registration, insufficient number of courses and insufficient number of seats.

Though these problems are very generic, we aim at resolving them for the additional semesters – the summer semester in specific – where the time slot for these activities is the longest.

 A small expansion in the domain of summer semesters can make it less painstaking and more friendly to all the stakeholders.

FFCS System in VIT: An introduction

STRENGTHS

- provides an open platform for course and faculty selection
- Teaches students about planning and making choices
- Students become responsible for their choices
- Students select courses based on interests and caliber
- The university collects feedback at the end of course.

WEAKNESSES

- Server fails to carry the load of thousands of systems trying to access them.
- There are many courses which need technical prerequisites not considered in the FFCS system.
- Many students fail to register for some courses or the faculty they want to work with due to server issues.
- Students in junior years have reduced chances of selecting desired courses and teachers.

OPPORTUNITIES

- Students learn the importance of planning and making choices
- Students select courses based on caliber.
- Students can drop courses or add new ones - can rectify options.
- There is an open and unbiased feedback on teachers.
- Interaction with students of various branches and streams.

THREATS

- Poor internet connectivity in Vellore
- Students are not very clear with courses.
- Many students fail to register for minimum credits on first day.
- A general apathy is developed as students enter senior years

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FFCS SYSTEM IN VIT

Changes required to improve Summer semesters.

- FFCS servers should be upgraded to handle more traffic

- Two slots should be added (D1/D2) so that more students can opt for Summer semester.

- New/More teachers should be added so more students can be accomodated.

- There should be a small number of reserved seats for students from the corresponding year.

- FFCS portal can be improved by removing auto logout option

- If possible, accomodation charges or reregistration charges should be reduced.

STRENGTHS

- Eases teacher selection by freshers
- Increases number of courses
- Increase in student enrollment
- increases student participation in the process
- Long-term students can complete their courses earlier.

WEAKNESSES

- Students may become lousy due to reduced arrears fee.
- Seniors may lose chance to go for good courses.
- Not many students will be interested in summer sem thanks to heat in Vellore.

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PROPOSED MODEL

OPPORTUNITIES

- Students who have arrears get a better chance to improve and learn
- Students without arrears can learn new things out of their curriculum
- University can cater to individual needs and interests

THREATS

- Heat of Vellore summers
- Apathy of the first year students.
- Paying additional fee might not be acceptable to many parents.
- Students might prefer online vocational courses over courses offered by a university during summers.
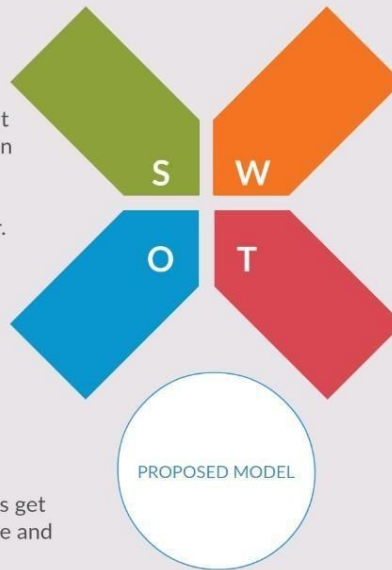
A proposed Algorithm for FFCS extension:

(The whole system works on a scalable cloud server)

1. The server opens.
2. The student logs in and enters the desired courses in order of preference.
3. For each desired course, he enters a list of teachers in order of preference.
4. The server registers the name of student, course and the teachers and the time at which student registers them.
5. Finally, the server collects suggestions – if the student wants any additional course.
6. Then, at the end of everyone registering, the system allots subjects and teachers on the basis of time of choosing and slots available.
7. This algorithmic allotment creates a table which is mailed by the system to the student.
8. The student can affirm to it at that point and make amends on the add/drop day.

Alternatively, this algorithm can be further simplified by using a simple chrome extension can help students select and register teachers beforehand. And this list can be uploaded to the server. The chrome extension can be made active a few hours before server is activated and it records time of registration with respect to the internet time.