**Deliverable 2 - Features Description**

**Suggestions/Notification (Nikunj Dixit)**

The Suggestion feature is a feature which gives suggestions and notifications to the user when regarding topics that they might want participate in. For example, if a student’s discussion history shows that they participate in discussions about Java learning, then the user may be given a notification or suggestion about an active discussion thread regarding Java programming. If they have a particular question or query about a certain topic, then the there is a suggestion/notification given regarding topics that are related to similar concepts that may help answer questions.

The thought process behind this feature is that it allows a greater efficiency with regards to discussion and guides students towards the topics that they would want to discuss and participate in and therefore increasing their active participation in the online learning community. For a student to be motivated to participate actively in discussions, there has to be some type of incentive. In this case the incentive is multi fold. Giving suggestions/notifications about topics or discussions that student may be interested in engages the student’s individual interest. It also helps the student if they have goal to learn about a certain concept because a suggestion/notification about a related concept would help the student learn better.

In addition to individual interest and learning goals, the feature also encourages intrinsic motivation among student. The students who are coming on the online discussions and asking questions are already expressing their interest in a topic. The feature provides them direction to more active discussion boards regarding the topics they would be interested in. According to a study published in the MERLOT Journal of Online Learning and Teaching, there is a positive correlation between intrinsic motivation and active participation in online learning communities [1]. Since the feature encourages and provides direction to intrinsic learners, the effect is the same students end up being more active participants in the online learning community in the topics they are most interested in.

[1] Xie, Kui, Vance Durrington, and Ling Ling Yen. "Relationship between Students’ Motivation and their Participation in Asynchronous Online Discussions." *MERLOT Journal of Online Learning and Teaching*  7.1 (2011): 17-29. Print.

**Leadership Challenge (Sai Prasanna Baskaran):**

**Description:**

**I**n any institution, be it online or in-class, whenever the student feels a sense of agency, i.e. whenever they feel that they are in a way driving the activity, they get a motivation to participate more. This is because their participation is crucial for the team success. This is why most often in class, whenever a student is picked as a facilitator for an activity, there is more participation from their side during the activity.

In this feature, whenever there is a group activity in Moodle, a student is selected (either automatically or by the instructor depending on the setting) as the leader (or facilitator) of that activity. Their roles become summarizing his team’s discussion, speaking/representing their team in debate and then getting everyone to do their part for the activity. Hence this kind of a feature would provide the student with a sense of agency, because they feel that their participation is going to be essential in the task.

Hence even though this would only be motivating the set of students who are picked as facilitators, if the selection system has a good balance of both rotation and rewards, so that everyone gets a few opportunities and people who do well are rewarded with more opportunities, then it can be said that through time everyone would be motivated.

**Challenges:**

How this student is chosen would present a challenge for this feature. The student chosen in the group can be done in the following ways:

1. Pick a student from the group in random,

2. Pick a student who did well last time.

A balance of both would ensure equal opportunity as well as rewarding people based on their activities.

**Benefits:**

1. Students who are agency motivated can be benefitted by this feature because they feel that their contribution counts in the activity and they have a sense of self-determination due to this [1].

2. Student also learns to be an active participant and driving the activity and the team’s success rather than a passive participant who just does the designated task instead of leading the group discuss.

**Citations:**

[1] Kuan-Chung Chen, Syh-Jong Jang, “Motivation in online learning: Testing a model of self-determination theory”, Computers in Human Behavior 26 (2010) 741–752

**User Hierarchy ( SAGAR KARRI)**

The idea behind this type of motivation is that we develop a hierarchy system where different students are placed in different levels of the hierarchy based on their points which reflects their performance i.e, participation in the class, giving good inputs in the discussions and also excellence in their course. Students with better points are in the higher layers. On top of this, the students who are in a higher level are to evaluate the students in the subsequent level. For example a student in level 5 evaluates and grades a student in 4th level. Similarly, the student in level 5 is evaluated by student in 6th level. So, students get motivated to escalate to the higher levels so as to evaluate the students with better standards which will be challenging enough for them as well as to gain respect in the group. In the pursuit of escalating to the higher level, the student works hard in his course and participates well in the discussions which in turn fetches him points needed. Though the main motto is to get into a higher level, this acts as a driving force for the student to work hard in the course.

In you look at the real world examples, a student studies hard to pass the exams and get into the next class also employees tend to work hard keeping the promotion in mind. Promotion is always a motivating factor let it be a hike in salary or a hike to the next level. This applies to the online learning too. Students get motivated to achieve more points and go to the next level. Let his/her intention be earning reputation in the group or be it the challenging nature of them to evaluate the higher standard students, the ultimate purpose of learning is satisfied.

There are moderators for the initial classification of students and to evaluate the students in the top most level. They were given the privileges to modify points given to students in all the levels.

**Citation:**

How do employees get motivated by promotion, by Ashley Miller, Demand Media, Globalpost.com

**Peer Recommendation Energy Points (Udai Arora)**

To motivate users, Moodle implements "Badges". Badges do recognize accomplishment, skill, etc, but the problem with badges is that they generally don't focus on rewarding effort- at least not in a tangible manner. To tackle this problem, we propose an additional motivational technique called Energy Points.

***"Energy points are a measure of effort contrary to badges- which are mostly a measure of accomplishment."***

A user can gain energy points by watching a video, getting a question right, earning achievement etc. The exact number of points gained will depend on the task completed. For example- Completing a video could give 100 energy points for longer videos and 50 for smaller one, answering a question correctly could add in 10 points each to the user's Energy Point tally, etc.

A user can also be given a certain number of energy points by participating in discussion threads and may gain energy points from peers as well during a discussion. Example- A user could reward another user Energy Points for a post which helped him a lot. Again, the exact number of points that can be given will depend on the rank or the position in the user hierarchy of the user giving the points.

Hence as we see, Energy points is something which increases in short terms and keeps the user motivated for more.

**Citation(s):**

[1] Antin, Judd, and Elizabeth F. Churchill. "Badges in social media: A social psychological perspective." *CHI 2011 Gamification Workshop Proceedings (Vancouver, BC, Canada, 2011)*. 2011.

**How the features complement with each other-**

All four features described above complement each other in its implementation and work together to improve student motivation to actively participate in the online learning community. For example, the students higher up in the user hierarchy can give more energy points to other users. Eg- Someone who has just started can only give 10 energy points compared to someone at a higher level who can give 50 energy points. Also, students higher in the user hierarchy will have a better chance of being selected as a leader by the algorithm used in the leadership challenge feature. There will also be Energy Points up for grabs on completion of the leadership challenge and depending on the performance of the facilitator during/after a leadership challenge. Users can also be notified about discussions which are related to their area of expertise which leads to them participating in such forums which in turn will help them in moving up in the hierarchy and gain more Energy Points as well. In this process, the user will also become a good contender for being the facilitator in the leadership challenge related to that area.

**Wireframe Feature Description**

Alias Feature

The Alias feature allows the student to create a separate name for themselves. This name can be used to post questions and discussion posts if the student wants to remain anonymous while posting which allows them to avoid peer pressure and be more open about their opinions and queries. The Alias feature can be used while using any of the other implementable features.

Leadership Challenge

For each activity, the leadership challenge feature selects one student from the team and appoints them as the leader of that activity. This makes the student to obtain a sense of agency and makes the user feel like they are in control of the activity, thereby providing motivation to participate in the activity.

Autonomous Extra Credit

In order to support social learning, an autonomous extra credit is provided to the users who involve in more discussions, giving proper inputs, and also to those who perform well in the course, like for getting full marks in a quiz or completing all the tasks on time in an efficient way. By personalizing the grading feature in the community to be autonomous, a user who is performing well is encouraged to give even better performance and participate more socially in the discussions and assignments while those who are lagging behind tend to put more effort and try to participate more socially to gain an extra credit.

Synergic Answer

Synergic response is a feature which will allow students to form a common response to a particular thread which summarizes the key points and opinions. However, each edit will go to the thread owner for approval to make sure it is in line with the thread and that it helps to better answer the query in the thread. In this way, every person who is suggesting an edit is indirectly interacting with the participants who constructed that synergic answer by building on the same idea and adding something new as well. This feature would be provided for a thread which crosses a minimum number of posts. This will ensure that the feature is employed in scenarios it is useful in.