When emulating the installation of the NASA\_EVA\_Gamification extension, data is gathered from pre-existing user progress via MediaWiki’s database. This pre-existing data is used in populating the gamification\_badges table, which is created for new installs of the NASA\_EVA\_Gamification extension, with badges that users have earned retroactively.

In the case of the email verification game that we have implemented in the Spring 2018 Semester, for retroactively awarded badges, we are populating the date\_badge\_earned field with a null value. There is evidence within the MediaWiki database for the date at which this badge would have been earned (the user\_email\_authenticated field, as described here: <https://www.mediawiki.org/wiki/Manual:User_table#user_email_authenticated>), but we decided not to use this date for one reason: consistency. We had thought about this for quite a bit; do we populate the date\_badge\_earned with the dates when available, do we just use the date of the installation of the extension, or do we just leave it blank?

By using the day of the extension, we felt that this information would cause confusion in comparing dates of other badges earned with other users in the future; users would see this universal date for a variety of badges and it would cause questions and confusion. The ideal scenario would be to use the date that the badge would have been earned, but the problem here is that while this is a very easy scenario to implement in this game, we discussed that there very well may be games that this scenario is not possible – what would be done in these cases? For consistency we decided to just leave the values null and badges that are awarded retroactively will not display a date in the User Gamification Profile page. This reduces confusion and provides consistency.

In the NASA\_EVA\_Gamification extension, we set up configurable values to use NASA-themed wording, but when the final extension is created and submitted to MediaWiki, it is recommended to come up with a generic naming convention for out of the box use that applies to a wider audience. For example, for the email verification badge, instead of calling it “Spacesuit Verified,” the badge could be called “Email Verified.” The same would hold true with creating generic names for the three base ranks which are currently “Astronaut,” “Spacewalker,” and “Moonwalker.” Perhaps “Bronze,” “Silver,” and “Gold” for a generic naming convention would be good.