



## Luzon Conference

November 15-17, 2016

PhilRice Central Experiment Station, Nueva Ecija

### Closed Box Challenge

*Overview:* This challenge will test the competitiveness of your students against other schools in terms of understanding the client-users and providing solution to them. This will also make way for us to offer working opportunities in PhilRice ICT in Agriculture projects through internship.

*Accept the challenge:*

A challenge kit will be uploaded at the event website, [agrihackathon.philrice.gov.ph](http://agrihackathon.philrice.gov.ph) on October 6, 2016. It contains requirements of the app to be developed. It has been provided more than one month before the event date to give the hackers enough time to develop their working prototype for the app.

To join, submit your team details at [agrihackathon.philrice.gov.ph](http://agrihackathon.philrice.gov.ph) on or before October 31, 2016. Teams will compete for the best implementation of the app according to the defined specification.

*Judging:* Each team will present their output to a panel of judges. Then, a question and answer portion follows. Outputs will be judged according to the execution of the requirements and the creativity of the app. If participants added some features which are not in the specified design, it will be in the judges' discretion to add extra points.

*Award and Prizes:* The **1st place winning team will get up to PhP90,000.00 worth of 2-month summer internship program** after graduation, plus **PhP9,000.00 cash prize** and perks. The 2nd and 3rd placers will get exciting perks and freebies.

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### Challenge Kit

#### Description

Develop an **Android or Web app** that provides in-season water, nutrient, pest, and disease management recommendations based on the age of crop and type of variety (short-duration, medium-duration, long-duration) inputted by the user. Age of crop is quantified using days after transplant - DAT or days after seeding – DAS. Your target user are farmers.

## Background

As the rice crop grows in the field after either by transplanting or direct seeding, farmers will have to monitor and act on four factors to achieve maximum potential yield of the plant: water, nutrient, pest and diseases. There are certain measures to be done and monitored for each factor depending on age and growth stage of the crop. Pinoy Rice Knowledge Bank ([www.pinoyrice.com](http://www.pinoyrice.com)) provides all the needed knowledge and information to be able to assess certain key checks as well act on recommendations.

There are three types of rice varieties based on crop maturity – Short-duration, Medium-duration, and Long-duration. The range of crop age for each growth stage of each type of variety is different from that of another.

## Recommended Activities

1. Identify the range of crop age per growth stage for each type of variety mentioned.
2. All information you need is provided at [pinoyrice.com](http://pinoyrice.com). Browse, scan, and read all materials which you think might help you not only in doing the app but also in understanding the problems faced by farmers.
3. Manually normalize data provided for Water, Nutrient, Pest, and Disease assessment and management recommendation based on crop age.
4. You may consult on PhilRice Text Center 0920 911 1398 for further information about rice farming.
5. Know more about your user. Who is the Filipino farmer?  
[https://www.youtube.com/watch?v=\\_dMGX04bIbs](https://www.youtube.com/watch?v=_dMGX04bIbs)