

# Update on SASRA activities for 2011/2012

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**3<sup>rd</sup> Joint SRR/PTMSS**

**6 June 2012**



# Vision

When it happens, we will be there

# SASRA

- 19 Feb 2011  
*Signed constitution as voluntary association*
- 20 June 2011  
*Presented foundation at PTMSS/SRR*
- 6 March 2012  
*Legalized as Non-Profit Company*



# Planned projects presented in 2011

Project	Status
Structural lunar soil simulant	Delayed pending prototype lunabot
PISCES student design	Shelved
NASA lunabotics	In progress
Paper on lunar mine design, possibly sand mining	Completed
Paper on evaluation of pneumatic excavator	Shelved
Mining innovation overlap	Restructured

# Objectives

Objective	Success count
1) Awareness	5
2) Technical contribution	3
3) Education	2

# Technical contribution since PTMSS/ SRR 2011

- RobMech 2011 paper: “*Space Mining Application for South African Mining Robotics*”
- AIAA 2012 paper: “*A Mining Engineering Approach to Mining Lunar Regolith*”
- SRR/PTMSS 2012 paper: “*Terrestrial Mining Applications for Lunar Regolith Excavation Robotics*”

# Awareness since PTMSS/SRR 2011

- Republished “*Space Mining Application for South African Mining Robotics*” in EngineerIT, May 2012
- 2x *Mining Weekly* mentions (1 September 2011, 10 February 2012)
- *Hosts >1 event per month*
- *Social media for awareness (Facebook, Twitter)*

# Education since PTMSS/SRR 2011

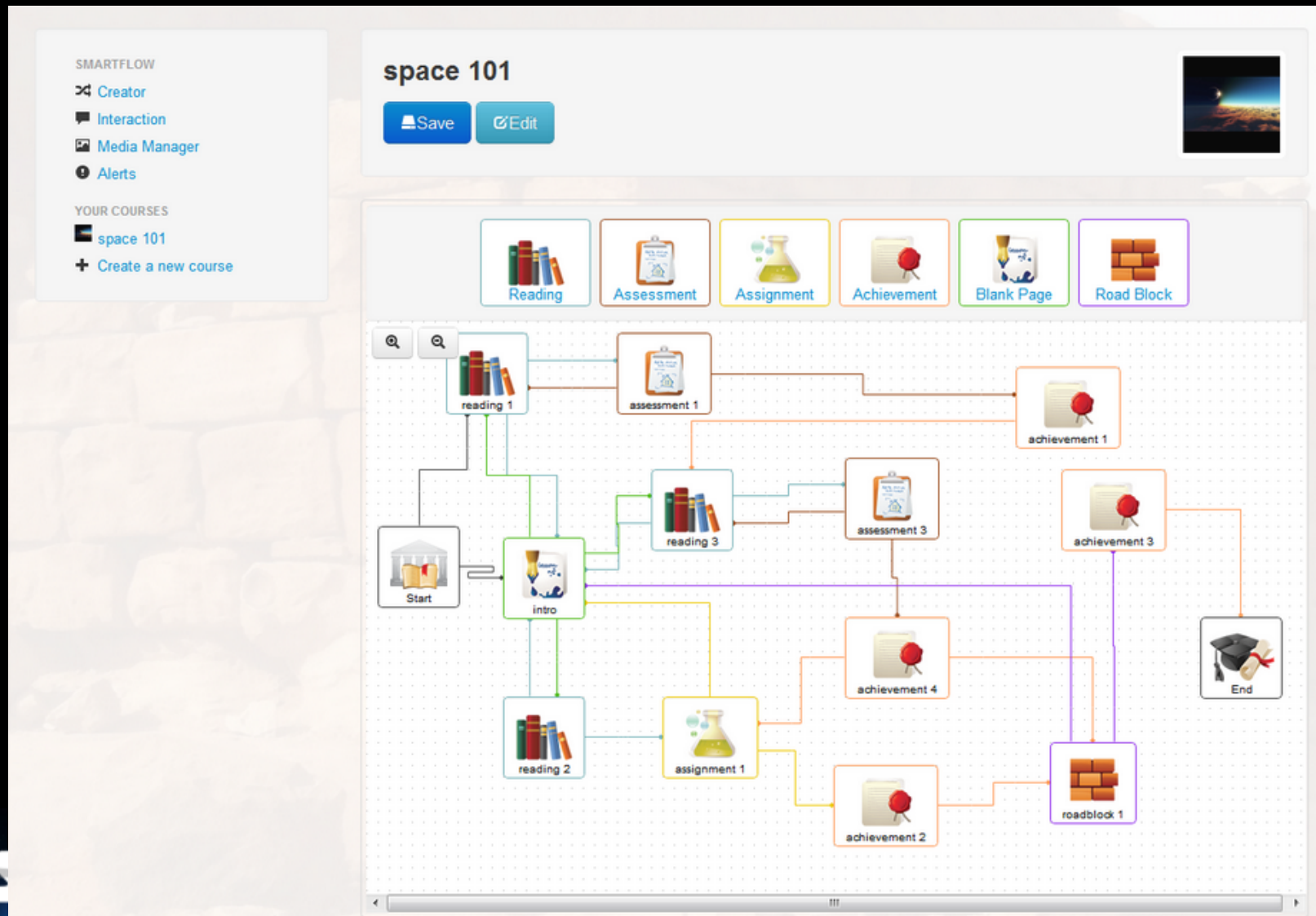
- Application Sponsor for *NASA Lunabotics* (*Google Play, Facebook, Desktop, Web*)
- Space, mining and robotics evening in collaboration with *PISCES, IEEE and CSIR*



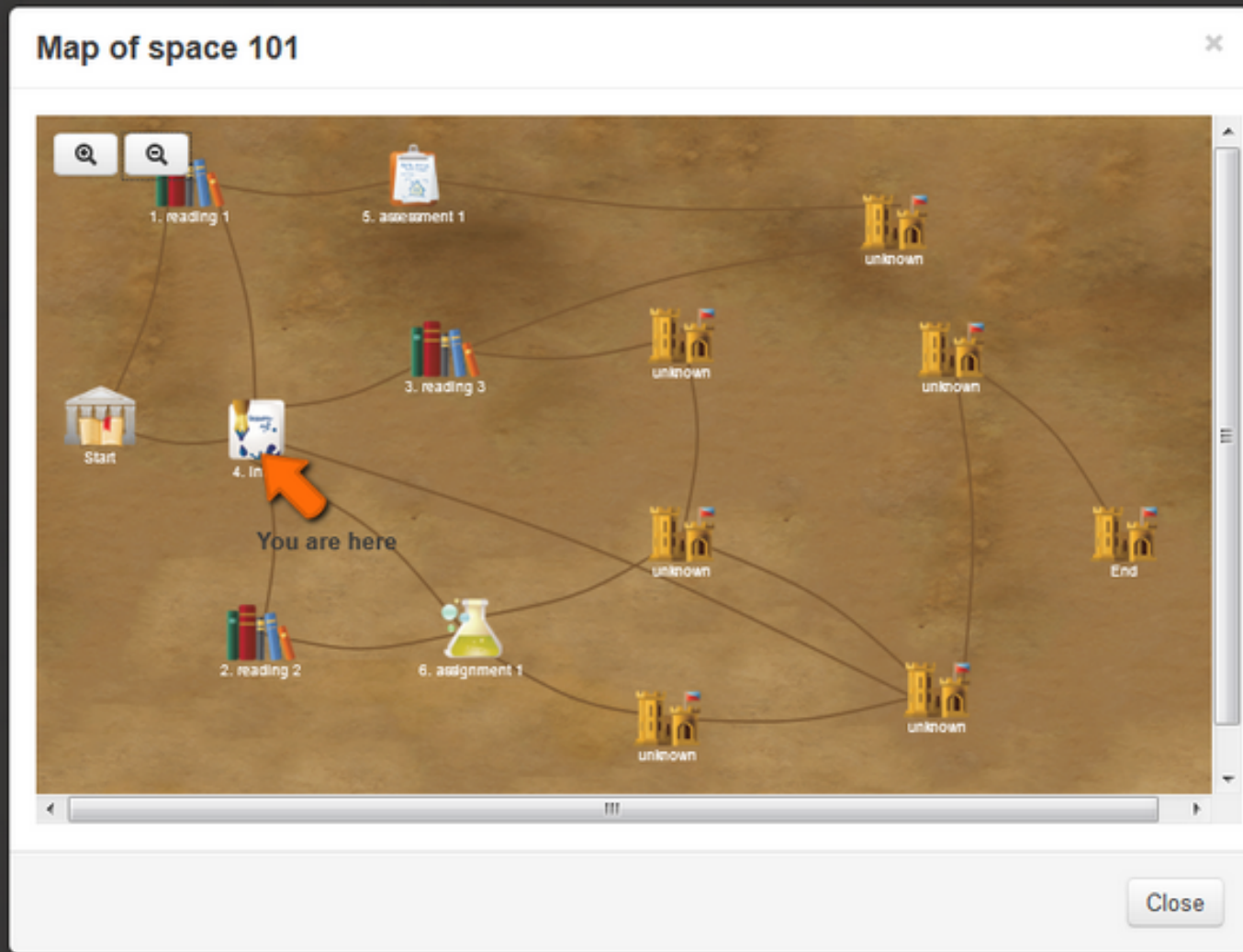
# Projects

- *Lunabotics app v2.0*
- *Lunabot*
- *Earth application*
- *Space Mining Wiki*

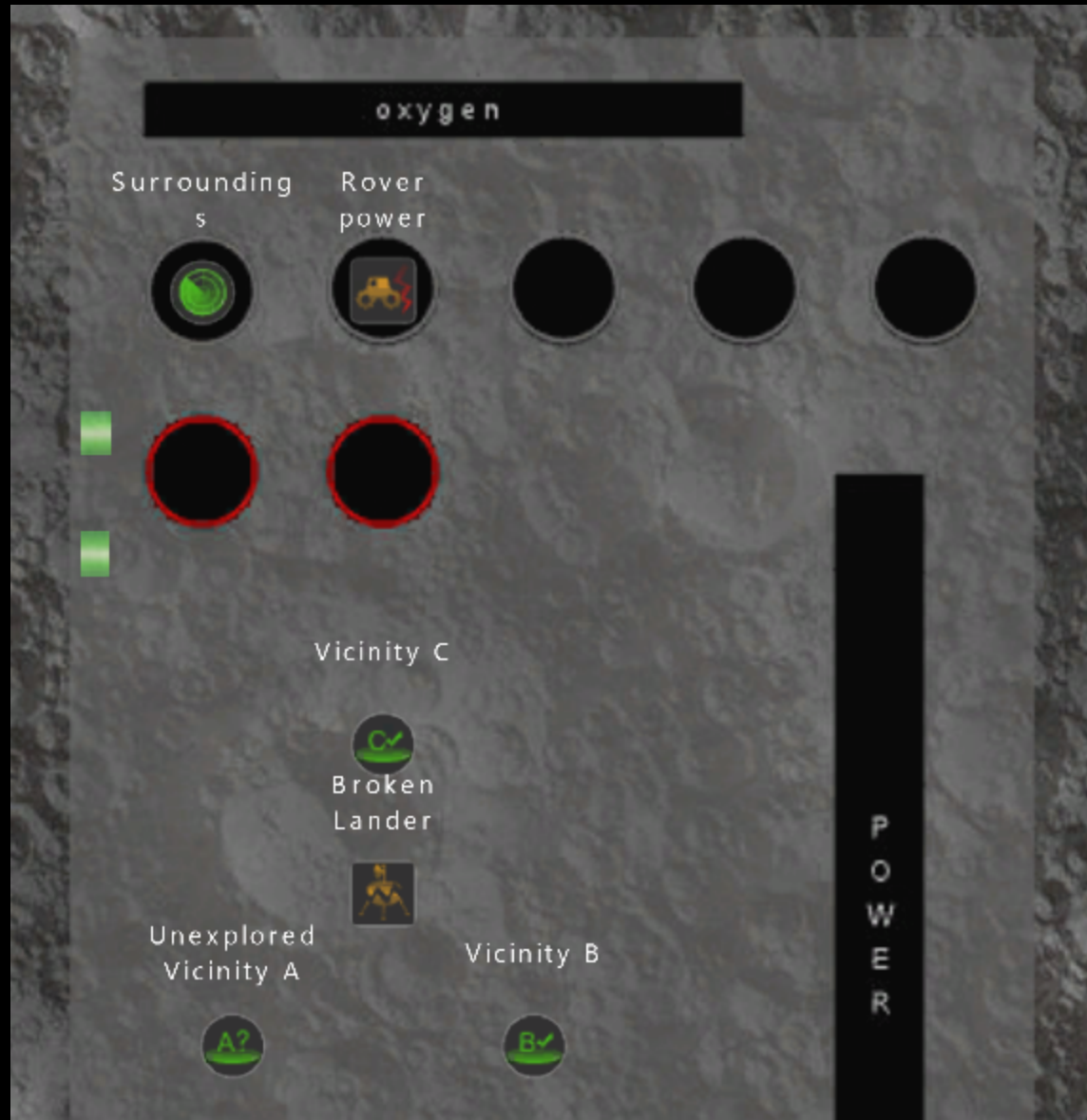
# African Mobile University



# African Mobile University



# Ore genesis



# Challenges

- *Time (voluntary part time company)*
- *No remuneration for people doing work*
- *Little money to invest in projects*
- *Lack of member involvement*
- *Lack of members benefit*

# Solution?

- *Followers instead of members (no explicit benefits or involvement)*
- *Open for general donations*
- *Project specific donations (real work only when minimum funds is achieved)*
- *“Work fees” in minimum funds (monetary benefit for doing work)*
- *Focus on projects that could return money*

# Conclusions

- *The past year was successful*
- *Exciting time ahead*
- *Challenges foreseen, possible solution proposed*

# Thanks to mentors

- Angel Abbud-Madrid
- Dale Boucher
- John Hamilton
- Kris Zacny
- Leslie Gertsch
- Rob Mueller



Questions?

Advice?