

# Enhancing the Pregnancy Experience for Expectant Parents

#### Medical Interpretation Is Insufficient

Expectant mothers wish to know more about the maternal and fetal health, but the information from regular health examination is not sufficient for interpretating their condition on daily basis.

#### **Expectant Partners Need More Guidance**

Expectant partners' role is extremely important during the mother's pregnancy process, but partners usually lack enough source to understand the mothers' health and emotional condition.

#### **Expectant Mothers Desire More Emotional Supports**

There exists gaps between what expectant mother needs and what partners have done. While partners usually provide more instrumental support; mothers value emotional supports more.



#### Real-time Maternal Health Measurement



Enable couples to browse real-time body data including weight, blood pressure, heart rate, sleep and activity collected by the wristband and personalized tips.

## In-time Notification to Both Expectant Parents



Push notifications or alerts to help expectant couples understand expectant mothers' health condition, identify potential issues and get in-time treatment.

### Improving the Couple Experience



Provide expectant partners instrumental advices and enable mothers to create to-do lists for the partners, thus improving the couples' overall experience.

#### Highlights



#### Personalized Health Recommendations

Not like the tips from general medical knowledge, all recommendations are based on real-time body data collected by the wearable sensors. Recommendations are more pertinent to maternal health condition.



#### Asymmetric Notification Settings

To keep from unnecessary stress, Nuwa enables expectant mothers to decide whether to receive notification or not. On the other hand, expectant partners would always receive in-time notifications to remind them of the maternal health condition and to comfort the mothers.



### Instrumental Advice for Partners

Based on expectant mothers' health condition, Nuwa provides advice to their partners on how to provide better instrumental support. At the same time, partners' participation can also provide much valuable emotional supports to mothers.

#### Formative Study



Based on 10 contextual interviews, 131 survey responses and secondary researchs, we learned about expectant parents' concerns and needs during pregnancy.

#### Personas



We created 4 personas (2 expectant mothers and 2 partners) and 3 sets of storyboard to identify and prioritise users' needs and requirements to our design

#### Ideation



We generated ideas and validated design alternatives. We decided to design a mobile system consisting of a sensing wristband and a mobile app.

#### Prototyping



We prioritised design ideas and iterated them by wireframes and prototypes based on the heuristics and user feedback.

#### **Evaluation**



We tested our design with users by wireframes and prototypes. Users are enthusiastic about the concept of our system while providing suggestions on design details.

